Introduction

Ukraine and Japan are two countries that have experienced the trials of war and natural disasters. Ukrainian students, with their rich experience in volunteering and studying during the war, can provide valuable recommendations to Japan for effective response to natural disasters. In turn, Japan can export sheltering technology and disaster education experience accumulated and built over the years under the threat of natural disasters.

The needed measures include active mobilization of student youth, providing appropriate training and preparation for students, as well as ensuring legal and social support for volunteers. Interaction between universities, non-governmental organizations, and authorities is extremely important for effective crisis response. Drawing from their own experience, Ukrainian and Japanese students and education facilities can assist each other in developing and implementing strategies that promote quick and efficient recovery after natural disasters.

Mobility and Autonomy

Both Ukraine and Japan are forced to consider improving the mobility system of their universities, which can be endangered by both artificial factors such as missile strikes, and natural factors such as earthquakes or tsunamis. An important issue in this matter is that educational institutions halt their activities after sustaining damage until it can be restored. A good example of addressing this problem can be found in the history of the destroyed Karazin Kharkiv National University, which suffered damage during a massive missile strike. However, the administration decided to relocate students and education staff to a safer place, where the educational process continued. It is also important to remember online education systems that allow learning to continue from any part of the world, taking exams, and even receiving diplomas upon completion of studies. A good example can be seen in the system used by students of the Ukrainian Catholic University called CMS, which is based on the Moodle platform. It provides access to all course materials, including assignments, exams, and quizzes. This essay suggests a more detailed examination of the mobility system for educational institutions in the face of threats and explores the technological capabilities that can help sustain educational activities even when physical attendance is not possible.

Volunteering

Comparing the experience of Ukraine and Japan, we noticed certain differences in the organization of the educational process in Ukraine during war and in Japan during natural disasters.

Ukrainian students gained rich experience in volunteering and studying since the beginning of a full-scale invasion, and so can share their experience and practices with Japanese students to promote effective response to natural disasters. This includes active mobilization of student youth, providing appropriate training and preparation for students, as well as ensuring legal and social support for volunteers. Interaction between universities, non-governmental organizations, and authorities is extremely important for effective crisis response. Drawing from their own experiences, Ukraine and Japan share experience in developing and implementing strategies that promote quick and efficient recovery after natural disasters.

In both Ukraine and Japan, students are the most active in volunteering, but due to the high workload of their education, they are not able to allocate enough time for that. A good

solution to this problem is for educational institutions to adjust their schedules, especially during and after disasters. In Ukraine, this practice has been partially applied, some universities, like UCU at the beginning of the full-scale invasion, stopped the standard learning process, and for several months students were able to engage in various areas of volunteering on and off-campus¹, while continuing their studies at a lower capacity.

An important drawback of the volunteer system in both countries is that the governments do not provide sufficient conditions for volunteering. For example, in Japan, the Ministry of Education, Culture, Sports, Science, and Technology (MEXT) has already appealed to the government to provide students who want to volunteer with special conditions. However, this has not been sufficiently addressed, and many students cannot afford to travel to the affected regions, and many of them are concerned about their safety given the high number of victims and missing persons². The government alone is not able to provide all the volunteer activities and solutions to the consequences of the catastrophe, so a horizontal model of functioning among volunteer organizations is reasonable in this case. In Ukraine, most organizations provide themselves with the necessary equipment for their activities, which greatly increases the number of people involved and is a more efficient way when fast action is required.

Another important part of volunteering, the skill of fundraising, is also a point of sharing experience, as the ability to finance the activities of volunteer groups on their own greatly optimizes their work and provides them with everything they need. In Ukraine, for example, the specifics of volunteering lie in the constant involvement of residents of the entire country in financial fundraising by volunteer organizations³. When volunteer groups engage in fundraising activities, it becomes easier and more efficient to address emergencies, as organizations are unable to finance all their activities on their own, especially when it comes to dealing with large-scale destruction and damage. Allowing students to learn the basics of fundraising at least at a basic level will help them to be successful in their volunteer work. Nowadays, fundraising can be done on social media, so it does not take much time and can be easily combined with studies, while the funds raised can help finance emergency activities, restore infrastructure, etc.

Shelters

The next topic to be discussed in this essay is shelters. Shelter facilities are extremely important during disasters in both countries. The main issues surrounding this topic are preparation for a potential threat, during which individuals need to descend into shelters, and the accommodation of a large number of people in a potentially safe location.

Ukraine can utilize the Japanese experience of conducting drills and simulations, accumulated over the prolonged experience of natural disasters, as well as disseminating manuals and instructions on actions during emergencies among the population. Japan can

events in Japan. IFRS. 2021. URL:

¹ How is UCU continuing education in conditions of war?. 2022. URL: <u>https://ucu.edu.ua/en/news/vak-uku-prodovzhuve-navchannya-v-umovah-vijny/</u>

² Akiko lizuka, Daniel P. Aldrich. Attracting altruists: explaining volunteer turnout during natural hazard

https://volunteeringredcross.org/en/recurso/attracting-altruists-explaining-volunteer-turnout-during-nat ural-hazard-events-in-japan/

³ *Ivan Shovkoplias*. It takes a village: how Ukrainians became a crowdfunding society in 8 months of war. 2022. URL:

https://war.ukraine.ua/articles/it-takes-a-village-how-ukrainians-became-a-crowdfunding-society/

also export technology for building a safe and secure sheltering system, which is currently heavily underdeveloped in Ukraine. This will help ensure the protection and safety of the community during disasters.

Disaster prevention education

One of the issues with disaster prevention education in Japan is the low awareness of people that don't usually face disasters.

One of the causes of such low awareness is the teacher's perspective. In Japan, disaster prevention education is described across a variety of subjects, so the quality of that education tends to depend on school or teachers' plan. According to the Japan River Association⁴, some teachers seem to have low awareness of disaster education. One teacher answered that "The school is located in an area with few disasters, so I think disaster prevention education is important, but I do not feel a sense of urgency for now.". This answer is clear that some teachers are not aware of this education priority.

Almost all schools in Japan have emergency evacuation drills a couple of times a year. However, unfortunately, some students are playing or talking to each other during the drills, so they don't concentrate on that. Thus, not only teachers but also many students in Japan have low awareness of disaster prevention education and lack a sense of impending disasters.

On the other hand, some regions which experienced natural disasters do valuable disaster prevention education based on their experience. For example, during The Great East Japan Earthquake, almost all the students in Kamaishi, which is located near the ocean, could escape from the Tsunami and survive, because of their education or training before the earthquake. Thus, Japan has both low and high awareness of disaster prevention education.

Regarding those issues, there are two recommendations to the Japanese government. First, to increase teacher training by the government. The current situation of teacher training for disaster prevention education is carried out by each school. Thus, if the government conducts more teacher training, it can spread valuable education based on region for the whole of Japan. Moreover, this can be an opportunity to get inspired by other regions, and increase teacher's awareness of disaster prevention education.

Second, the government should change the curriculum guidelines and disaster prevention education to be a required curriculum. As mentioned above, disaster prevention education is described across a variety of subjects and tends to depend on school or teachers' plan. This situation makes education unbalanced in regions or schools. Thus, the government should change guidelines for schools or teachers to do the same quality of disaster prevention education.

The aforementioned practices are applicable for both Ukraine and Japan, and should be considered for both education systems.

Conclusion

Ukraine and Japan are similar in their hardships. Both countries have to survive through life-threatening disasters, and thus are urged to share their experiences for common good. While Ukraine can export practices of horizontal integration and fund-raising, Japan can export shelter technology and share disaster preparation practices. Both countries have to

⁴ Japan River Association. "[Disaster prevention education nowadays...? ver.5] Bousaikyouiku no ima ha...? ver.5." 2018.

find efficient ways to increase awareness, and such techniques could be also shared between the education systems.

We have offered recommendations for overall changes in certain processes and found challenges in the field of training. The aforementioned elements will help mitigate the impact of crisis situations on communities and facilitate rapid recovery after disasters. The collaborative efforts between universities, student organizations, and authorities should be firmly incorporated into the system of measures to ensure the safety and well-being of the population during emergencies.

What do you recommend to governments for improving education responses to future crises?

GROUP3

Education is an important development trajectory. In Ukraine and Japan, the educational process has experienced considerable challenges. The experience of countries can be useful for the exchange of innovative practices aimed at ensuring quality education in crisis conditions.

The war in Ukraine affected many areas, and education is one of them. To begin with, many educational institutions have been destroyed. On December 9, 2022, former Minister of Education Serhiy Shkarlet reported that more than 2,800 Ukrainian educational institutions had been destroyed since the start of the full-scale Russian invasion [1]. A lot of schools and universities which are close to the frontline are unsafe for students anymore. The other challenge for Ukraine is to return those students in the future who have left abroad to escape the war. According to the Ministry of Education and Science of Ukraine, 492,077 school-age students were abroad by September 1st, 2022 [2]. It is very important to keep these students engaged in the Ukrainian education system, so it would be easier for them to come back. In October 2022, Russia launched its first massive attack on Ukrainian energy supplies. For several months, Ukrainians lived in blackout conditions. Teachers could not broadcast lessons online and students could not join them. Moreover, it was not always possible to charge phones and laptops for a long time. The education system faced another challenge - to organize the learning process in such conditions.

Although the battle zone is localized, the risk of air attacks affects all regions of Ukraine. Education in particular is disrupted by air raids, which occur at various intensities and intervals in Ukrainian cities and villages. No matter if the enemy reaches its target or not, for safety reasons, classes should be stopped during an air alert or, if the circumstances allow, a group of students should be moved to a bomb shelter and continue class there. But even if an air strike occurs outside of working hours, especially at night between 2 and 6 am, it is still very exhausting for civilians. Moreover, if some people get tired of hiding in the bomb shelter and stay at home, they risk their own lives. In our opinion it's important to mention the psychological aspect of being in emergencies. So, war in Ukraine affected all levels of society, including school and university students. Being in shelter while air alerts or near a battle area (even if it's localized) creates psychological pressure and some difficulties with the studying process.

Japan, a disaster-prone country, faces various risks such as earthquakes, tsunamis, typhoons, volcanic eruptions, floods, and landslides. The devastating 2011 earthquake and tsunami, accompanied by the destruction of nuclear facilities, caused immense human casualties and had far-reaching impacts on the economy, infrastructure, and education. The educational landscape underwent a significant transformation, with many students facing the risk of disrupted learning and uncertainty about when things would return to normal. Regional disparities were evident, and the reopening of schools in heavily affected areas took time. The reasons for this included the destruction or damage of school buildings, the use of schools as evacuation shelters, and the need for teachers and staff to focus on shelter operations instead of

school preparations. Additionally, the evacuation of thousands of people, including students, due to the nuclear plant incident further complicated the situation. Many students were forced to transfer schools, and some lost family members or their homes. The government survey revealed that 25,751 students had to attend different schools after the earthquake and Fukushima nuclear accident [3].

The situations described above demonstrate the high likelihood of learning interruptions after a disaster, as establishing a suitable learning environment becomes challenging. However, the obstacles to continuing education extend beyond school closures, as circumstances can vary even within the same regions. Students who experienced frequent school transfers and significant missed class time present difficulties in tracking and ensuring their active engagement in education. This concern is particularly pronounced for secondary-level students and beyond, as it tends to directly affects their future educational decisions. The government has announced flexible measures for school admissions and the provision of supplies as needed [4]. Nevertheless, ensuring the continuity of learning remains challenging, especially when parental or familial decisions may vary regarding support for students who have missed substantial learning opportunities.

Based on this experience, it is necessary to provide recommendations to the government of Japan to prepare for future crises and to the government of Ukraine to combat the consequences of the war in the educational sphere. Firstly, there is a need for an immediate response after a disaster, during the war, ensuring that students who are willing and able to continue their studies have accessible opportunities. Setting up asynchronous studying can be a way to ensure students have access to educational process. This format assumes that the student does not need to be present in a specific location or online at a specific time. Teachers record part of the lessons on video and upload them to electronic platforms such as Google Classroom, accordingly, students have access to course materials, lectures, assignments, and other resources at their own pace and on their own schedule. This format can be practiced in offline learning conditions in order to form the habit of pupils and students to use such platforms. In addition, in the case of the inability of students to attend online learning or the inability of teachers to provide online consultations, governments can initiate the creation of a national educational platform for distance and mixed learning of students and methodical support for teachers. In Ukraine, the All-Ukrainian Online School has become a modern online resource for mixed and distance learning of middle and high school students with materials that have passed examinations and meet state educational standards. This could be introduced to Japan as an efffective approach since it provides flexibility that allows students and teachers to customize their leaning based on the parts they may have missed. Asynchronous studying can greatly improve the situation and help prevent educational disparities.

Secondly, community-based education can become an innovative approach to fight the consequences of crises and their further avoidance. It involves setting up temporary learning spaces in communities where schools have been destroyed or where access to education is limited. Creating opportunities for mixed mode of learning in communities, where schools have been destroyed: educational centers, modular schools, temporary classrooms in public buildings that survived shelling can serve as an opportunity for learning under the conditions of rebuilding educational institutions and restoring the educational process. For example, in Ukraine, in order

to support students in some schools in Chernihiv and Kyiv Regions, digital education centers have been arranged with the help of savED and Save the Children [6]. They give students the opportunity to visit the centers for individual consultations and communication among themselves and with teachers. This experience can be useful for the Japanese government in terms of rebuilding educational institutions. Ukraine in order to implement community-based education can use collaborative approach. This will allow public organizations, international organizations and other stakeholders to be involved in the process. In order to ensure this approach, Ukraine can use the experience of Miyagi Prefecture in Japan, which created a system that designates a head teacher to be responsible for Disaste risk reduction in each school across all of the public schools in Miyagi. He/she develops the DRR primary functions by drafting annual plans and in-school trainings at the schools, and outside school, coordinating school-community partnerships. Also, elements of community-based education can be defined as the process of using the local community and environment as a starting point for learning concepts across the curriculum. For example, in Japan to help make local communities safe from disasters and sustainable, children are taught to cultivate their affections for their hometowns and helped to understand and appreciate both the "benefits" and "disadvantages" presented by Nature, especially in their communities [10]. The government of Ukraine is recommended to pay attention to this experience of Japan.

What is more, in order to develop a sustainable educational process, it is worth drawing certain conclusions and creating conditions for a quick response to natural disasters or war conditions. Japan uses disaster management systems in pair with creating resistant educational spaces (resistant to earthquakes) for protecting students from natural disasters. International Safe Schools (ISS) Designation Program that promotes a safe, secure school environment and was initiated by the World Health Organization (WHO) [10]. The term "safe school" does not imply that the school is in itself a perfectly safe environment, but that the school community and its surrounding community, e.g., parents, teachers, students, administration, staff, businesses, etc., are committed to continually striving to build a safer environment of Ukraine is recommended to develop a comprehensive strategy for the reconstruction schools with clear safety rules and procedures in the communities.

In conclusion, Japanese and Ukrainian experiences in some cases are pretty diverse, but in others are really similar. Ukraine has a lot of educational challenges and Japan, because of its unstable natural area, need to respond. Ukraine needs to know how to live in war and educate new generations and Japan needs to be always in focus. That's why we need to develop our countries in community based education. That's why we should promote safe schools and that's why we should grow in asynchronous format. That helps us to be a little bit confident in the bright future.

References

1. The Aggressor Has Damaged and Destroyed More Than 390 Educational Institutions in Ukraine Since September 1.

https://www.ukrinform.ua/rubric-ato/3631325-agresor-iz-1-veresna-poskodiv-i-zrujnuvav -v-ukraini-ponad-390-zakladiv-osviti.html

- More Than 4 Thousand Ukrainian School-Age Children Returned to Ukraine in the Last 11 Days, Serhiy Shkarlet. https://mon.gov.ua/ua/news/ponad-4-tis-ukrayinskih-ditej-shkilnogo-viku-povernulisya-v -ukrayinu-za-ostanni-11-dniv-sergij-shkarlet
- 3. Naohide K. *Rebuilding Schools After the Great East Japan Earthquake: Current status and Challenges*. Issue Brief. 2012, vol736, p.1-12. https://dl.ndl.go.jp/view/download/digidepo_3382819_po_0736.pdf?contentNo=1,
- 4. Ministry of Education, Culture, Sports, Science and Technology. 2011. Ensuring Educational Opportunities for Children and Students in the Disaster-affected Areas of the Great East Japan Earthquake and Tsunami (notification) [Notification No. 1714, 2012-03-14].

https://warp.ndl.go.jp/info:ndljp/pid/10348666/www.mext.go.jp/b_menu/houdou/23/03/1 303644_1537.html

 Disaster Education in Japan: Preparing for Natural Disasters to Protect Kids' Lives | Web Japan. (n.d.). Web Japan.

https://web-japan.org/kidsweb/ja/cool/20/202011_disaster-prevention-education_ja.html

- Kogut I., Nikulina O., Syrbu E., Zheriobkina T., Nazarenko Y. War and Education. How a Year of the Full-scale Invasion Influenced Ukrainian Schools. https://cedos.org.ua/en/researches/war-and-education-how-a-year-of-the-full-scale-invasi on-influenced-ukrainian-schools/, (21.05.2023)
- 7. Burde D., Kapit A., Wahl R. W., Guven O., Skarpeteig M. I. Education in Emergencies: A Review of Theory and Research. https://www.jstor.org/stable/44667668, (21.05.2023)
- 8. *Why not helmets? Japan's school disaster hoods stir debate*. (2022, February 7). The Japan Times.

https://www.japantimes.co.jp/news/2022/02/07/national/school-disaster-hoods/

- Educational Facilities Research Center (2019) <u>https://www.nier.go.jp/English/educationjapan/pdf/20190408-01.pdf</u> The Safety of School Facilities in Japan
- Sakurai A., Sato T. Promoting Education for Disaster Resilience and the Sendai Framework for Disaster Risk Reduction. https://www.fujipress.jp/jdr/dr/dsstr001100030402/. (21.05.2023)

What do you recommend to governments for improving education responses to future crises?

Group 4 (Iku Nakamura, Marina Mizuki, Roman Rozhankivskyi, Sophia Kolesnyk, Bohdan Teplyi)

Introduction

Humankind has been experiencing a variety of emergencies, including natural disaster, pandemic, war and conflict. The current ongoing war in Ukraine is causing significant impacts on both people inside and outside of Ukraine. Education under this extreme situation is unbelievably difficult. On the other hand, Japan also experienced different emergencies including earthquakes. With comparisons between Japan and Ukraine in terms of education under emergency, this essay attempts to explore and clarify the significant elements for educational implementation by the government, potentially indicating the recommendations for the future. This essay first address the similarities and differences between situations Ukraine has and Japan had for each emergency: Ukraine crisis and earthquakes. Based on them, it then suggests and explains the measurements that government can take for the future.

Similarities

There are several common characteristics identitified among education under emergency. One of them is disruption and restoration of education. As Burde at al (2017) argue, emergencies in general halt education at different levels. On the Ukraine side, classes at university stopped right after the war started, and also Japanese schools in areas impacted by the earthquakes had to stop as many schools' facilities are destroyed. Nevertheless, both nations saw the resume of education in different way. In Ukraine, school started functioning in online platforms (CEDOS, 2023) and providing students with options of in-person and online, or education transfer where students move to different areas or nations to continue study. In Japan, people started education by moving to other parts of Japan. Another similarity is the involvement of emergency. In Ukraine, as war continues, students initiated volunteering for the medical or mental supports for people impacted by war. In Japan, we have seen students who volunteered to help people who escaped to evacuation areas. Lastly, the importance of funding for education is noted. Ukraine and Japan both have seen the need of funding to restore education infrastructure. For Ukraine, schools have been striving to gain funding from the international partners (CEDOS, 2023). Japan also seeked for the financial support inside and outside Japan. In short, disruption and restoration of education, involvement of emergency, and financial need can be expressed as similarities between Japan and Ukraine's experiences.

Differences

Recent "emergency" situations include the earthquake in Japan and the military invasion by Russia in Ukraine. However, these situations differ in terms of whether they were caused by nature or manmade, which would affect the length of the emergency period and the method of reconstruction. According to a UN (n.d.), an emergency is an event that can be responded to using the resources available at hand, implying that there is no need to request external assistance. A disaster, on the other hand, is characterized by impacts that overwhelm the capacities of local responders and place demands on resources which are not available locally. Hence, an event is declared as a "disaster" when there is a need for external assistance to cope with its impacts. Based on the report of the Substance Abuse and Mental Health Services Administration (SAMHSA, 2015), Natural disasters and human-caused disasters are different types of disasters, and the required response can be further

subdivided. For example, earthquakes are basically sudden and one-off events. After the earthquake, the damage and destruction of infrastructure will be more accurately assessed and, if necessary, infrastructure will be rebuilt. A minimum level of learning environment can then be established and children can resume their studies. However, human-caused disasters can be sudden or gradual, depending on the case. Since they are often long-term, they are exposed to a state of emergency all the time and must continue to learn while preparing for damage. In the case of man-made disasters, the scale of the disaster may shake the national system.

Policy Recommendations

First, it is very important that under any crisis agenda remains clear. Students should only avoid education if there is imminent threat to life or health. All other reasons have to be bypassed and if issues arise to be solved. Therefore all the options should aim at creating a safe environment to save lives and health and to create opportunities to acquire knowledge and skills under extraordinary circumstances. Students in education facilities need to feel that lessons are up to date and relatable to the situation in their prospective country. Even in peacetime there is a strong disconnection between students' worldview and school curriculum. Moreover, we should strongly review architecture planning and to emphasize expansion of underground rooms, basement and facilities. It provides a clear advantage of shelter while under barrage of different projectiles. Also those new expansions have multipurpose use. Those chambers might be employed for the benefit of the economy, welfare etc. Infrastructure is a good way to develop wealth and to create an environment for development. Also we need to create easy access to the internet in shelters and underground. Not always people will be capable of being present in the same room.

Conclusion

Comparing education under emergencies in Ukraine and Japan reveals similarities and differences in their experiences. Disruption and restoration of education, the involvement of the affected population in providing support during emergencies, and the need for funding to restore educational infrastructure are commonly seen in both nations' case. However, differences arise due to the nature of the emergencies including the length of impacts. Based on these findings, several policy recommendations can be made as follows.

1) Prioritize the safety and health of students, halting education only when there is an imminent threat to life or health.

2) Ensure that lessons are relevant to the situation and bridge the gap between students' worldviews and the curriculum.

3) Include the expansion of underground facilities in infrastructure planning, providing shelter, and enabling multi-purpose use.

4) Ensure easy access to the internet in shelters to facilitate remote learning during emergencies.

By implementing these recommendations, governments can better navigate education during emergencies and provide a safe and conducive environment for learning and skill development.

(988 words)

Reference

Burde, D., Kapit, A., Wahl, R. L., Guven, O., & Skarpeteig, M. I. (2017). Education in Emergencies: A Review of Theory and Research. Review of Educational Research, 87(3), 619–658. <u>http://www.jstor.org/stable/44667668</u>

CEDOS. (2023, March 21). War and Education. How a Year of the Full-scale Invasion Influenced Ukrainian Schools. Cedos. <u>https://cedos.org.ua/en/researches/war-and-education-how-a-year-of-the-full-scale-invasion-influenced-ukrainian-schools/</u>

United Nations. (n.d.). Emergency and Disaster Management | UN-SPIDER Knowledge Portal. Www.un-Spider.org. <u>https://www.un-spider.org/risks-and-disasters/emergency-and-disaster-management#no-back</u>

SAMHSA. (2015, January 12). Types of Disasters. Www.samhsa.gov. https://www.samhsa.gov/find-help/disaster-distress-helpline/disaster-types# What do you recommend to governments for improving education responses to future crises?

Written by:

Miyabi Miyazaki Cheng Ziqi Natsuki Masuda Daniel Mediakovski Yevhen Potishka Sophia Matsuik

As we have witnessed, the educational system has to be flexible enough to face challenges, caused by crises. During the last decade there was no stable situation in Japan or Ukraine when educational institutions could have stuck to the one-defined strategy and just simply followed it. Nowadays educational systems that could face emergencies and quickly respond to them have become a real privilege and the only way to complete a high-quality education of the future specialists of all fields, starting from the very basic level of pre-school education. Therefore the government of all levels should take into account the most possible and seem-to-happen threats as well as create different scenarios to reach its solution.

Developing the remote learning system was one of the effective ways of providing good-quality education to students during global crises. After the Kumamoto earthquake in April 2016, Kumamoto prefecture started to develop remote education for students. Therefore, at the time of Covid-19 proliferation, Kumamoto Prefecture started online courses very smoothly as they were already aware of its specifics and had already incorporated those education methods into the program.

As well as the Ukrainian educational system, there were already 3 years of remote class education, before the full-scale war had been started. From 2020 to 2023 the majority of Ukrainian schools and universities were using online or hybrid formats to educate their students. The quick transition became possible because of the previous preparations from both sides teachers and students as well.

On the other hand, how to solve the problem of online classes for students from poor families is an issue that we must consider(maybe they do not have enough resources to buy computer or tablet computers and wifi for online classes). And it will result in greater educational disparities.

To solve this problem, we think, firstly, the government should invest more in scholarships. This can help students who are unable to continue their studies due to poverty or family changes. And secondly, increase investment in public education, such as building venues and renting equipment for online courses. By doing so, educational disparities caused by economic disparities can be minimized.

Next important priority is mental health for pupils and school stuff during crises and generally. Governments should have a high priority on the qualified specialists and psychologists who can assist students and staff through future crises. This can be done by developing a state program with international cooperation, especially those countries who had experience facing great crises, like Ukraine or Japan, for psychologists that focus on educating professionals on how to handle emergency circumstances and work with pupils and school staff to cope with panic and fear and to prevent mental health problems among students.

Highly qualified psychologists can provide consultations to students not only during significant crises or catastrophes. Students may require continuing professional care for their mental health. And regardless of whether there is a crisis, psychologists should be accessible to students who feel the need to address mental health issues. Students who have regular access to counseling services can become less stressful, learn not to panic during crises, and develop the ability to assist others in overcoming difficult circumstances by attending specialists who can teach how to control one's emotions.

The awareness about institutional preparations emergencies can also help students to cope with stress caused by knowing the risks and possible results of war, tsunami, earthquake and other threats. Every school and university should have a sufficient number of emergency kits, foodstuff and water, as well as an equipped shelter for those who may have need of it. As globalization augmented the population's mobility, a significant part of students and educational system workers have developed mobility, so they should have access to all conditions in case of emergencies.

Besides that schools and universities should make extra classes that will teach how to act in critical situations. The lecturers should be people who are familiar with those topics, for example doctors, fire workers, warriors, rescuers. We believe that these workshops will help people to increase their knowledge about those topics and probably save lives in future.

Unfortunately, for now in Ukraine and many other countries there is a big problem with the schools or university locations. Many of them were built with the idea that they would be close to residential areas and thus be a convenient place to get to, but this is not entirely strategic, because in industrial cities where a large percentage of the population works in factories, educational institutions will be located next to such buildings, which can be a threat.

We can even consider the case of UCU. The university is located very close to a thermal power plant and the Army Academy, so during a war, these two facilities are strategically important and potential targets. Being located between these facilities puts the university's students in danger, and therefore, it is not the best place strategically to choose to build such an institution. The natural terrain and other features that may pose a potential danger should also be taken into account. Another example is the Aberfan

disaster, which occurred in 1966, due to the shift of the tericon that was caused by prolonged rainfall. Unfortunately, there was a small village near the tericon, part of which, along with the school, was covered with a pulpy mass. At that time, 116 children died. From this we can conclude that the construction of educational institutions should take place on a safe plot of land, away from facilities that may be of strategic importance during the war, as well as places where various major breakdowns or accidents can occur (heat power stations, nuclear power plants, various factories), or places where the terrain may pose a threat (steep mountain slopes, coastlines, etc.) In addition, it is important to consider that students should be able to get to their places of study safely and thus highways and railroad lines can also be dangerous.

Therefore, we propose that local authorities set stricter rules for the construction of educational institutions, give them priority in the selection of land and conduct a detailed analysis of the area.

Another important step, in our opinion, is the unification of the education system. For the most part, Ukrainian school education is quite unified and there are often no problems when moving from one school to another, but the issue of higher education needs to be changed. It often happens that in order to transfer from one university to another, a number of subjects need to be retaken in the same program, which makes the transition quite difficult. In times of global crises, such a system is burdensome for students, because there may not be time to retake the subjects. That is why we propose to make common core subjects for all universities and specialties; any subjects can be used as additional subjects, but the total number of both free choice and compulsory subjects should be the same. This change will help students integrate better and more easily into other educational institutions. In addition, we should try to make education standardized for other countries, such as the EU, where the system is quite similar in most countries.

Ultimately, collaborating and learning from international experiences with countries that have overcome crises need to be a high priority for governments in the educational system. There are all kinds of crises happening in the world every day. And almost every country and region has its special approach to disaster response. But on the other hand, each place has its own characteristics, so there is no perfect way to deal with these disasters. Therefore, international cooperation becomes very important. The government should actively organize and participate in it, improving national disaster prevention measures and education by sharing experiences with other countries. This approach will not only help educational institutions overcome future crises but also be prepared to face immediate challenges in the educational system more effectively.