

The Legacy of a Pandemic: Lessons Learned and . . .Being Learned

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Abstract

Ukrainian education has traditionally been face-to-face. It has been criticized for the slow integration of technology and web-based instruction into teacher preparation. The following factors have contributed to a resistance to change: political and financial challenges, lack of qualified personnel to create online infrastructure, lack of experience with online curriculum development and systems management, and fears that the quality of knowledge would decrease. The pandemic of 2020 has revealed and deepened the conflict between traditional teaching and modern practices. It has created many unexpected challenges for Ukrainian students and professors.

Keywords: pandemic, web-based instruction, online infrastructure, immense stress.

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Preface

When university faculty and administrators were told with just a few days' notice that they must start teaching from their home remotely they felt “immense stress”, “fear” and “anxiety”. An array of feelings that could easily lead to depression and despair. The university faculty, of course, had apprehensions regarding contracting the coronavirus. In addition, faculty were stressed due to the home quarantine and only a vague idea of how to redesign the educational process for online learning. There were serious doubts about compliance with equity issues, academic syllabi, time management, assessment standards, and how to award student credits. In addition, because the pandemic arrived during the spring semester there were issues regarding state attestation and professional certification of the graduates.

Flashback

In 2014 - 2015 a group of faculty members from two Ukrainian universities, Vinnytsia State Pedagogical University (VSPU) and Vinnytsia National Technical University (VNTU), and one American university - Southeast Missouri State University (SEMO), developed a collaborative research project. The focus of the project was on web-based learning and the role of technologies in supporting democratic tendencies in Ukrainian higher education (Powell, et. al, 2014; Powell, et. al, 2016). A publication summarizing some of the research focused on VSPU in its efforts to democratize the educational process and enhance teacher preparation through integrating educational technologies. Technology applications made education at VSPU more transparent and supported student openness to international collaboration and consequently to be more competitive in the educational marketplace (Powell, et. al, 2014).

The research highlighted significant drawbacks in technology implementation in other universities in Ukraine. The era of distance learning in Ukraine began with creating the Ukrainian Distance Learning Center and the President's approval to provide Internet access in the year 2000. This resulted in establishing the "pedagogical experiment in distance learning" in 2002 (Powell, et.al, 2014). However, there were no conspicuous changes made in curricula design or technology integration. Furthermore, even order # 40 issued by the Ministry of Education and Science which legitimized distance education in 2004 (Powell, et.al, 2014) did not succeed in infusing online learning into Ukrainian higher education.

Joining the European Bologna Process in 2005 (Towards the European Higher Education Area, 2004) required increased attention to online education and to equipping educational institutions with modern computers and technology, creating local centers of distance learning and providing internet connections inside educational institutions. Regrettably, the process of technology implementation in educational practices was slow as governmental orders from Kyiv were often ignored.

Because many university professors and the university leadership had poor web-literacy skills and the budgets were insufficient to help improve the technological knowledge and update the equipment (Kahkonen, 2018), distance learning was viewed with skepticism regarding its ability to improve Ukrainian education.

The conclusion of the US and Ukrainian research collaboration was that there were, only eight to ten Ukrainian institutions significantly involved in implementing innovations in distance education, despite the orders and recommendations from the Ministry of Education and Science (Powell, et. al, 2014; Powell, et. al, 2016). According to the Segodnya UA e-newspaper, many

higher educational institutions didn't demonstrate much enthusiasm about integrating distance learning into training giving preference to face-to-face instruction (Yaryzhko, 2013).

The pandemic highlighted that the situation didn't change for the better in the years that followed, although the Ministry of Education and Science considered the issue of online education as a serious one (Ministry of Education and Science of Ukraine: Distance and Online Services in Education, 2017-2019; Ministry of Education and Science of Ukraine, 2017-2019; Governmental Portal.gov.ua, n.d.).

The European Educational Initiatives Project was launched in 2016. It was designed to train Ukrainian Instructional Technology (IT) specialists in world-class IT knowledge through - the development of programs of collaboration with higher educational institutions in Europe, by establishing IT training centers for IT state certification, by disseminating successful technology integration knowledge, and by supporting the use of the knowledge within Ukrainian universities (Ministry of Education and Science of Ukraine: Modern IT Education in Ukraine, 2017-2019)

In the spring of 2020, when Ukrainian universities quarantined, according to Yegor Stadny, Deputy Minister of Education and Science of Ukraine, only about 20 universities (out of 652) were ready to respond to the pandemic crisis (Sakalo, May 16, 2020). The collaborative research of 2014-2015 appeared to be prophetic since it dealt with the issues Ukraine was forced to face due to the impact of the COVID-19 pandemic.

After March 12, 2020, the exact date of the quarantine, Ukrainian educators could divide their professional activity into "pre-pandemic" and "during the pandemic" phases. The pre-pandemic face-to-face education was well-regarded and considered sufficient. It was clearly outlined and supported by orderly timetables. This made the professional routine well-organized, secure, and student performance and achievement – steady. Students and teachers followed the

designated room numbers, class titles, and time frames inside universities from morning till late afternoon each day except Saturday and Sunday.

Face-to-face classes exhausted both learners and instructors due to long class hours and then additional assignments at home. This traditional structure fostered faithful attendance, maintained teacher control in the classroom, and lead to consistency and permanence in learning. These practices and activities were comprehensible and expected and accepted by generations of students. That is why the development of the university's online infrastructure had not been considered a priority. Besides, modernizing online instruction did not rise to a priority due to the many economic and political challenges Ukraine has faced since it achieved independence in 1991.

Nevertheless, there was an interest in the advantages and disadvantages of online learning (Blayone et al., 2018; Blayone et.al., 2017; Mykhailenko, Zogla, Blayone, Lubkina, 2019; Zaytseva, 2012; Sekret, 2012; Antonova, Hristov, Kunev, 2018; Klokar, Benderets, Borbit, 2011). An increasing number of educators regarded developing students' IT competence as "ensuring the relevance of education to the demands and opportunities of society" (Morze, Barna, Kuzminska, Vember, 2017; Kovaliuk, Kobets, Grinchenko, 2019). Keeping abreast with the modern tendencies in education, due to more and more intensive international collaboration and exchange, the Ministry of Education and Science of Ukraine launched the New Ukrainian School project. This project was aimed at providing each student with equal access to a highly quality education, which is hardly realizable without modern technology application and web-literacy (New Ukrainian School, 2016; New Ukrainian School. Conceptual Principles of Reform, 2016; Ukrainian Education in the New Era, 2018). The Internet was utilized as a resource, digital gadgets, and Facebook facilities – as tools of instruction (Dogruer, Eyyan, Menevis, 2011; Zmiyevska, Glazunova, 2018).

Some universities made the first steps to introduce the elements of web-blended and online teaching (Powell, et al, 2014; Mykhailenko, Blayone, vanOostveen,2016). Yet, these efforts fell short of compliance with the traditional vision of the Ukrainian academic environment. Such innovations were often viewed as entertaining and motivating in engaging students more deeply in content knowledge, but only within the face-to-face classroom environment. The web-based initiatives were never taken seriously as an actual alternative to traditional instruction.

Online Immersion

Due to the pandemic a complete transition from face-to-face to online teaching needed to happen quickly. Ukrainian educational institutions figuratively and literally became online institutions overnight. The shock was immense, the situation – unprecedented. It is hard to determine who was challenged more: students or their instructors.

COVID-19 forced Ukrainian educators to abandon traditional academic practices. They had no choice but to respond to the change instantly which, to their credit, they did. Through their attitudes and actions, instructors demonstrated their commitment and professional obligation to continue instruction no matter what. Many were motivated by the responsibility for their students who needed the instructors' undivided attention academically and psychologically.

Both students and teachers had to learn new skills. Very often the teachers were only one step ahead of their students in the online findings and discoveries. Both parties explored the educational opportunities and learning platforms simultaneously, beginning with opening an account, downloading computer applications, and aligning with the standards of quality teaching.

Many had never used Zoom, never heard of Discord or Hangouts or many other online tools. The online platforms were undertaken in a record time mostly through self-schooling. Although there were a few sites that did provide some information about online teaching (president.gov.ua., March 24, 2020; ifes.org.news ., April 20, 2020).

However, the actual transition to online classrooms couldn't wait for quality training of the instructors. The instructors did not rely on the courses offered by the sites. Each day brought new issues and teachers had to respond to the particular situations. Students had the right to demand expertise, technological awareness, and effective instruction.

Google Classroom, Skype, Zoom, Moodle, Hangouts, Google Meet, Discord were chosen to substitute for the face-to-face classrooms. They became the facilitators of student engagement and the re-creators of the academic environment - a space for student-teacher collaboration, content delivery, checking assignments, and self-study. Different platforms had unique features that could be applied to different tasks and teaching aims.

Google Classroom was used for informing students about scheduled classes and home assignments and providing a space for submitting the written works. This platform provided a class profile where students could see performance and attendance records. Google Classroom was also helpful in test development.

Zoom, Google Meet, Discord, Skype, Hangouts were helpful for interactive activities and lectures. They were used in classes of conversational English with monologue and dialogue presentations and to support working in groups on text analyses and text interpretations. The “*share screen*” function enlivened the lectures with video and audio materials and enhanced understanding with Power Point presentations.

Faculty members opened group chats on Viber, Telegram, WhatsApp to brainstorm about educational opportunities, methodologies and to discuss the new educational platforms.

Following are some of the common questions that arose:

- What are the best online resources to use in place of face-to-face teaching to fulfill the academic curriculum and not to fail the semester?
- How to effectively utilize online educational platforms?
- How to adjust the face-to-face instruction methodologies to the new online settings?
- How to engage and encourage students to perform their best when they were dispirited by the situation?
- How to account for student progress and assess it objectively?

These questions were addressed in the process of developing the online system.

Sometimes they were not the very best answers, sometimes they were erroneous. Learning from mistakes enabled improvement to occur. However, the biggest mistake was trying to replicate the face-to-face experience online.

Working from home created a feeling that we weren't working hard enough – as a result, teachers wore themselves out planning how to occupy students. This resulted in overloading students with tasks that were mostly written, which was physically and psychologically difficult. Approximately 80% of students complained about spending too much time on written work. But that was equally stressful for teachers who had to grade the submitted work.

On average a Ukrainian instructor is responsible for 70 - 120 students per semester which is a significant load. Instructors' Skype contact lists were crowded with students' accounts. Viber and WhatsApp chat lists on Instructor's personal mobile phones were also overburdened. These technologies were used to create more student engagement. However, there seemed to be a

subconscious attempt to try to control student performance as if students were in a face-to-face classroom.

The pandemic required us to evaluate the potential and quality of technologies and existing applications. The pandemic crisis highlighted the vulnerability of various technologies and internet infrastructure. Zoom, Skype, Discord, Google Meet did not provide the desired standard of quality.

Difficulties were most apparent during high volume periods when many classes were online at the same time. Both audio and video aspects of Skype and Zoom would freeze or were distorted. Google classroom systems often malfunctioned when the students submitted their written work. Students had to duplicate the written assignments and send them to instructors' emails. That created confusion and upset students. One of the VSPU students indicated she understood that the quarantine was not an obstacle and the distance was not an obstacle, but the poor Internet connection and lack of technological know-how turned out to be.

The pandemic provided multiple opportunities for problem-solving technical difficulties. For every breach and malfunction, students tried to find a fix. For example, when connections were poor, they muted microphones and switched off cameras without being reminded. But these interruptions frustrated teaching plans. The rapid adoption and widespread use of free applications underscored the need for the platform developers to improve the quality of service. Those developers that assess and improve their platforms will, surely, realize economic rewards (Sevilla, 2020).

New Objectives

The pandemic crisis created a new challenge for Ukrainian education. However, the need for technological modernization was evident prior to the pandemic. COVID-19 only made the

weaknesses and vulnerabilities of many Ukrainian universities more evident. The crisis will have far-reaching consequences. Neither students nor teachers will want to re-live these stressful experiences.

The pandemic era has underscored that despite many accomplishments Ukrainian education should consider online instruction as a beneficial feature and make it a legal and full-fledged feature of the academic environment. We can support the democratic process by making education equitable, more flexible, and adaptable to the needs of each student. The introduction of web-based instruction, including: university online platforms, learning system management, and online academic curricula will make online learning viable and valid. This will increase the flexibility, adaptability, and problem-solving capacity of educational institutions.

Despite the years of work experience and earned educational degrees, the pandemic has highlighted the need for instructors to be open to self-education and a willingness to quickly adapt to changing circumstances. COVID-19 has revealed the importance of developing international collaboration with other educators to bolster professional development and growth. All of us are in the same boat, the challenges we face are different to some extent, but also similar in many ways. Many hands make hard work easier.

The crisis has made the challenges in student learning habits and ethics evident. Some students lacked good self-discipline, self-organization, self-education skills. Their ideas about deadlines, academic honesty, conscientiousness - were immature. Certainly, future teachers require maturity in decision making and self-discipline. The pandemic experience may prompt our universities to offer students more freedom and trust. And as a result, help instructors be more open to providing students more self-control. This should lead to more self-sufficient and confident teachers which will in turn benefit the students.

The technologies enabled instruction to continue and in this sense it was a blessing. However, due to the differences in internet availability and signal strength, and access to a computer, student inequities were made more acute. Not all students could join the classes conducted on Zoom, Skype, Discord, etc. Students who lived in remote or poverty-stricken areas, where there was no access to the Internet or its quality was low, were particularly impacted. Participation in classes arranged on some platforms was impossible without having expensive digital gadgets.

Conclusions

Looking back over the three-month quarantine there have been lessons learned. On the whole, Ukrainian educational institutions coped with the challenge: the academic year was completed; academic syllabi were followed in accordance with requirements; the finals and the state certifications were also completed. The authors attribute this to the dedication of the university faculty, flexible university leadership, and students' understanding of the current situation.

When asked about their impressions, some students feared distance learning would be a huge obstacle. That it would be too challenging, meaningless, and would not be productive. Some said they were not ready for this format and thought it would be impossible to gain knowledge in this way and so were particularly anxious.

By the end of the semester, opinions had changed. Many said they had found many advantages of web-based instruction over traditional face-to-face learning. They learned many new online applications and platforms, which provided them with easy access and multiple informational resources. Ironically, many indicated that the pandemic had made a positive change in their education and recommended that distance learning should be introduced in

Ukraine. Students were grateful to the university professors who worked very hard to ensure that the online learning experience would be beneficial.

The pandemic crisis is not over yet. What to expect when it is over? What is the post-pandemic era going to be? Interestingly, the pessimistic and optimistic anticipations appear approximately equal. On the positive side: we have been engaged in self-education as never before. This newly acquired knowledge will, definitely, benefit Ukrainian education. Despite the isolation it imposed, the pandemic consolidated educators and non-profit educational communities all over the world in helping each other live through the times and survive professionally (President. gov.ua, 2020; Ifes.org.news, 2020). It has imposed many changes that are progressive and a breakthrough for Ukrainian universities. Thanks to general technological advancements, the expenses for creating an online university infrastructure seem more feasible. The 2020 spring semester experience using free educational app opportunities has proven this fact. The technical progress has freed us from creating online tools “from scratch”. It offers plenty of ready-made applications. The main challenge was the time and energy required to learn to utilize the tools.

On the other hand, the pandemic has increased separation and isolation. It has alienated people, impacted communication and the quality of life. The pandemic has made life feel more businesslike and less friendly. Some are concerned it may lead to a cultural and communication crisis. However, judging by the response from the educational communities in Ukraine (The Fulbright Fund; Community of Ukrainian Educators: Uniting for Justice and Equity; the British Council; Pangeya-Ultima; Erasmus +; Associations of medical workers: psychologists and psychiatrists, etc.) and international organizations such as the Global Community Uniting for Equity (GCUE)TM, we are confident communication and support will continue inside the home

countries and internationally. The pandemic emphasizes that we are not alone in the world, but all connected, and we will learn and prosper when we work together.

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