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# Кваліфікаційна робота СТАВЛЕННЯ СТУДЕНТІВ ТА ВИКЛАДАЧІВ ДО ДИСТАНЦІЙНОГО НАВЧАННЯ

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#### Кваліфікаційна робота

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## **Qualifying paper**

# STUDENTS' AND TERTIARY TEACHERS' ATTITUDES TO DISTANCE LEARNING

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#### **INTRODUCTION**

In recent years, the landscape of education has undergone a profound transformation with the advent and widespread adoption of distance learning. This paradigm shift has not only redefined the traditional classroom setting but has also prompted a reassessment of the attitudes held by both students and tertiary teachers towards this innovative mode of education. As technological advancements continue to bridge geographical gaps, providing unprecedented access to educational resources, understanding the perspectives and sentiments of key stakeholders becomes imperative. It is therefore crucial for the education system to endeavor to delve into the nuanced attitudes of students and tertiary teachers towards distance learning, exploring the factors that shape their perceptions, and shedding light on the implications for the future of education.

In exploring the landscape of online education, a diverse array of literature offered insights into various facets of distance learning. Research on distance learning delves into statistical trends, investigates student perceptions, and examines challenges such as group projects and interactions between online and traditional classes. Additionally, studies on teaching and learning explore effective pedagogical practices and the impact of leadership on student outcomes. Highlighting the challenges and impacts of distance learning, other works discuss its consequences, advantages, and disadvantages, particularly in the context of the COVID-19 pandemic. Comparative studies compare perceptions between instructors and students, analyze distance learning from both student and teacher perspectives, and explore its application in foreign language teaching. Lastly, discussions on educational technology trace the evolution of ed tech over 25 years, providing valuable context for understanding the intersection of technology and education. Together, these diverse sources were involved in suggesting ideas, offering help to achieve this research that takes a closer look at students and teachers in Transcarpathia.

The relevance and rationale of the topic is the exploration of students' and tertiary teachers' attitudes towards distance learning/teaching. It is paramount in the current educational discourse marked by rapid technological advancements and an increased reliance on online platforms. As traditional educational paradigms evolve, understanding the perceptions of key stakeholders becomes crucial for shaping

effective policies and practices. The main goal was to unravel the intricacies of attitudes towards distance learning, providing valuable insights into the dynamics that influence the acceptance and effectiveness of this mode of education.

Primarily, this study is **aimed** to find out the teachers' attitude towards distance education, and secondly to highlight the common and different features of the attitudes of tertiary teachers' and students' towards online education at Ferenc Rákóczi II Transcarpathian Hungarian College of Higher Education and Uzhhorod National University. This research is verified by an attitudinal survey that evaluates teachers' opinions about online learning. It examines the sequential stages of teaching.

#### The main questions of the research

- How do tertiary teachers perceive and engage with distance learning methodologies?
- What factors contribute to the formation of these attitudes among both students and tertiary teachers?
- Are there any statistically significant differences in teachers' attitudes toward learning before and after distance learning became an important part of our lives? What impact did it have on the teachers?

The subject matter is the attitudes held by students and tertiary teachers specifically in the context of distance learning. It examines their preferences, concerns, and overall perceptions related to online education, shedding light on the multifaceted nature of their experiences in this evolving educational landscape.

The primary **objective** of this research is to gain a comprehensive understanding of the attitudes towards distance learning among students and tertiary teachers. By investigating their perspectives, the study aims to identify patterns, trends, and potential areas for improvement, contributing to the ongoing discourse on the efficacy and acceptance of distance learning in higher education.

Three research **hypotheses** were formulated before the research was started that had to be proven or refuted by the research data:

H1 Most teachers' attitudes towards online education are negative.

H2 Students and tertiary teachers exhibit diverse attitudes towards distance learning, influenced by factors such as prior experience and technological proficiency.

H3 There are significant differences in attitudes towards distance learning based on variables, such as age.

While striving for a comprehensive understanding, this research is **limited** to the Transcarpathian Hungarian College of Higher Education of Ferenc Rákóczi II and the National University of Uzhhorod students. The chosen teachers filled out the survey during the first semester of the academic year 2023/2024. Factors such as access to technology, and socio-economic backgrounds may have impacted the generalizability of the findings.

Through a comprehensive examination of teacher and student attitudes, this study has important **pedagogical implications** for the future in that, based on the findings, it can provide valuable insights that can inform educational policies, instructional strategies, and technology interventions, ultimately promoting more effective and inclusive learning environments in the contemporary educational environment.

#### PART I. LITERATURE REVIEW

In establishing the credibility of any research endeavor, a comprehensive review of both past and present studies is indispensable. Delving into the realms of previous linguists works provides invaluable insights into the subject matter at hand. Throughout the course of this research, particular emphasis was placed on scrutinizing sociological studies, although the inclusion of various articles, posts, and reviews proved to be equally enlightening. Fortunately, an ample array of literature was available, offering thorough and detailed insights that greatly informed the development of this work. It is worth noting that while many have explored similar topics, each contribution brings forth unique perspectives, conclusions, and experiences, enriching the collective discourse on the matter.

The basis of the entire research is based on online education, but as it was already mentioned, it is important to study and find the root causes in this case. Some would call this type of learning a curse, some would call it a blessing, it is all just a matter of perspective and education system, but let's face the facts. Although not on a global scale, distance education has always existed in some small form even before COVID (and in the case of us in Ukraine, before the war), so according to many, it is not difficult to determine whether we would have fallen so quickly into the digital world without to the world in terms of education... but based on research and trends before the epidemic, we can make some well-founded guesses.

Before COVID-19, online education was already experiencing steady growth, driven by technological advancements, changing educational paradigms, and increasing demand for flexible learning options. Research conducted by organizations such as the Babson Survey Research Group and the Online Learning Consortium had consistently reported growth in online course enrollments and institutional adoption of online learning tools over the years preceding the pandemic. Based on these research groups, the factors included:

- Technological advancements: continuous improvements in internet connectivity, digital devices, and educational technology platforms were making online learning more accessible and effective.
- Changing demographics and learning preferences: the rise of digital natives and a growing population of working professionals seeking to upskill or reskill were

driving demand for online education. Additionally, learners were increasingly drawn to the flexibility and convenience offered by online learning platforms.

- Cost and accessibility: online education often presented a more affordable alternative to traditional brick-and-mortar institutions, removing barriers related to geographical distance, transportation costs, and accommodation expenses.
- Institutional adoption and accreditation: many universities and educational institutions had begun incorporating online courses and degree programs into their offerings, recognizing the potential to reach a broader student base and enhance their competitive edge (Allen & Seaman, 2016).

However, it is essential to note that the pace and scale of online education expansion might have been different in the absence of COVID-19. The pandemic acted as a catalyst, accelerating the adoption of online learning globally out of necessity rather than choice. Institutions that had been hesitant or slow to embrace online education were compelled to pivot rapidly to remote teaching and learning modalities to ensure continuity of education during lockdowns and social distancing measures. While the pandemic accelerated the adoption of online education, it also highlighted challenges such as the digital divide, equity issues, and concerns regarding the quality of online learning experiences. Post-pandemic, the trajectory of online education will likely be influenced by factors such as technological advancements, pedagogical innovation, regulatory frameworks, and societal attitudes towards digital learning.

Therefore, while online education was already on a growth trajectory before COVID-19, the pandemic played a significant role in expediting its widespread adoption. Without the disruptive force of it, the pace and extent of online education expansion might have been way slower and more varied across different regions and institutions.

Oleksandr Kostyuk delved into the findings of a recent study by Stanford scholar Eric Hanushek, highlighting the evident repercussions of the COVID-19 pandemic on education quality. The study underscores a stark reality: the pandemic's disruption will likely translate into a considerable decline in individuals' lifetime earnings, amounting to a staggering \$70,000 or a 5.6% reduction compared to prepandemic levels. The economic ramifications extend even further, projecting losses totaling \$28 trillion for the United States by the century's end. Hanushek's examination focused on analyzing mathematics test results from U.S. schools,

leveraging these empirical data to draw insightful conclusions. Notably, the study draws a direct correlation between the adoption of distance learning during the pandemic and its impact on students' skill development, with far-reaching implications for their future productivity in the workforce. The discourse centers on the adverse effects of COVID-19 on secondary education, underlining the detrimental consequences of extensive reliance on distance learning. Hanushek underscores that these losses stem from the inherent limitations of remote education, which fail to adequately nurture critical skills such as problem-solving, teamwork, and critical thinking.

Moreover, there's a looming concern that similar negative repercussions could extend to higher education, exacerbated by the ongoing challenges posed by the pandemic and other global crises, such as the conflict in Ukraine. This underscores the imperative of addressing these educational setbacks and devising effective strategies to mitigate their long-term impact on individuals and economies alike (Kostyuk, 2023).

The second part, the research on students' attitudes towards online learning has been aided by works such as the study titled "What is effective online teaching and learning in higher education?" authored by Jace Hargis sheds light on a critical aspect of the discourse. It delves into various challenges inherent in online education, such as stringent time constraints, the involvement of a large faculty and student body, inadequate infrastructure, limited experience in online teaching, diverse perspectives and attitudes towards online pedagogy (including instructor selfefficacy and student autonomy in learning), and the complication of time zone disparities among students. Hargis (2020) underscores a prevailing consensus among researchers that effective online education should prioritize pedagogical principles (andragogy). However, he emphasizes the contemporary necessity for educators to grasp the technological intricacies in order to provide equitable learning opportunities. This aligns with insights from Weller's (2020) comprehensive metastudy, which accentuates the historical trajectory of technology integration in education, as discussed in the article. Thus, it is imperative for educators to not only focus on pedagogy but also understand and utilize technology effectively to enhance the online learning experience for students.

In the course of conducting research, it was recommended to thoroughly examine existing literature, as it facilitates a swifter acquisition of new insights and diverse perspectives on the subject matter. A significant portion of research on students' perceptions of distance education (DE) courses, whether blended or fully online, primarily involves students enrolled in online courses (Daniels & Feather, 2002; Dobbs, del Carmen, & Waid-Lindberg, 2017; Hannay & Newvine, 2006;). Certain studies compare the perceptions of DE between students attending traditional in-person classes and those engaging in online learning. Furthermore, additional investigations encompass undergraduate as well as adult learners, covering a broad spectrum of topics pertaining to the online learning environment (Horspool & Lange, 2012; Seok, DaCosta, Kinsell, & Tung, 2010b, a). This comprehensive exploration not only enriches our understanding but also highlights the significance of diverse perspectives in evaluating the effectiveness and reception of DE.

Moving on, recent educational reforms have advocated for a shift towards student-centered learning within physical learning environments (Kumari, 2022), highlighting a departure from traditional instructional methods. To comprehend the distinctions between these approaches, it is essential to examine the specific experiences and challenges encountered by students during the learning process. For instance, in the context of language learning, pre-exam tasks serve as illustrative examples to discern the differences between traditional and distance learning methods.

According to Miroslav Trajanovic, Dragan Domazet, and Biljana Misic-Ilic (2007), pre-exam tasks and activities play a crucial role in evaluating language proficiency, focusing on language abilities such as grammar, vocabulary, and language functions. Notably, the allocation of more time for preparation in e-learning settings can alleviate stress among students, enhancing their readiness for assessments.

The study conducted by Hopker et al. (2021) delves into the exploration of technology utilization and its impact on teacher confidence in fostering teaching and learning with variation for fluency among 16-19-year-old GCSE math re-sit learners across diverse learning environments. This research contributes to the existing literature by offering empirical evidence and practical implications for educators, policymakers, and stakeholders involved in the design and implementation of technology-enhanced learning environments within the context of GCSE re-sit programs. It sheds light on the critical intersection of technology integration and pedagogical practices aimed at enhancing student fluency in mathematics,

particularly among learners undertaking GCSE re-sit examinations. By examining the role of technology in supporting teaching practices and its influence on teacher confidence levels, the study provides valuable insights into effective instructional strategies and interventions tailored to meet the unique needs of re-sit learners in education.

In their study, Sari and Nayir (2020) delve into the challenges encountered in distance education amidst the COVID-19 pandemic. Central to their qualitative investigation are the perspectives and experiences of teachers navigating the abrupt transition to remote teaching. The authors meticulously analyze the multifaceted challenges faced by educators during this unprecedented period, shedding light on the intricacies of adapting pedagogical practices to virtual learning environments. By exploring the accounts of teachers, the study unveils the complexities inherent in remote instruction, including technological barriers, pedagogical concerns, and socio-emotional implications. Through a qualitative lens, Sari and Nayir offer valuable insights into the lived experiences of educators amidst the pandemic, elucidating the nuanced challenges and opportunities inherent in the shift to distance education. Their research underscores the importance of understanding teachers' perspectives in devising effective strategies and support mechanisms to mitigate the challenges associated with remote teaching and ensure the continuity of quality education during crises.

During the creation of this work, several Ukrainian researches were studied, as one already was mentioned already, it is a must to reference another study by Sydorenko and Sydorenko (2022) on distance learning, where attention is drawn to the importance of the ability of teachers to use online platforms. The authors analyze the views of students and teachers on this issue, revealing various perspectives and challenges associated with the transition to distance learning. The study reveals that the ability of teachers to effectively use online platforms is a key factor in the successful implementation of distance learning. The authors emphasize the need for systematic training of teachers to use digital tools, as well as the importance of supporting and training teachers in the development of their competencies in this direction. The results of the study indicate the importance of further efforts in the field of training teachers to work with online platforms to ensure high-quality and effective distance learning. It is imperative to consider research that examines how teachers manage online tools and instructional techniques through collaborative efforts and peer support, that is when Joint practice development and Sharing good practices comes to mind.

Studies conducted by Viviane Robinson, Margie Hohepa, and Claire Lloyd (2007) emphasize the significant impact of educational leaders who actively facilitate teacher professional development on student achievement outcomes. Through rigorous research and analysis, the authors delve into the complex dynamics of school leadership, exploring not only what works but also why certain leadership approaches yield positive results. By synthesizing the best available evidence, the authors shed light on the pivotal role of leadership in shaping student outcomes, highlighting key factors that contribute to effective leadership practices. This literature serves as a valuable resource for educators, policymakers, and researchers interested in enhancing educational leadership and improving student achievement. It offers evidence-based recommendations and actionable insights to inform leadership development initiatives and guide efforts aimed at fostering positive educational outcomes. It also underscores the effectiveness of Joint Practice Development (JPD) initiatives as a means to promote collaborative learning and enhance teaching practices.

According to Hargreaves and Fullan (2012) Joint Practice Development involves teachers working collaboratively in small groups, sharing problems of practice, observing each other's teaching, and reflecting on their experiences to improve their practice. Another explanation of JPD was made by O'Sullivan (2012) meaning Joint Practice Development is a process of professional learning that involves teachers in working together to systematically improve teaching and learning in their schools.

Moving on to the similar, yet different approach, SGP, again, there are several definitions – in this research, two are mentioned:

Stated by Fullan (2016), Sharing Good Practice involves educators exchanging successful pedagogical methods, resources, and experiences with colleagues, fostering a culture of collaboration and continuous improvement.

In line with the perspective of Hattie (2009), Sharing Good Practice encompasses the process of identifying, celebrating, and disseminating effective teaching strategies and approaches among educators, with the aim of enriching the professional community and enhancing student learning experiences.

Determining whether Sharing Good Practice (SGP) or Joint Practice Development (JPD) is better depends on various factors such as the context, goals, and preferences of the individuals or organizations involved. Each approach offers unique benefits and may be more suitable depending on the specific circumstances. SGP is effective for disseminating successful practices and showcasing what works well. It can be beneficial for quickly spreading innovative ideas and strategies across a broader audience. SGP may be preferred in situations where the primary goal is to share best practices efficiently and inspire others to adopt similar approaches. On the other hand, JPD emphasizes collaborative development and improvement through collective action. It fosters a deeper level of engagement, reflection, and joint learning among participants. JPD may be more appropriate when the focus is on fostering a culture of continuous improvement, innovation, and professional growth within a specific community or organization.

Based on the research of Viviane Robinson, Margie Hohepa and Claire Lloyd (2007), the following comparison table was created by Patzer (2020):

Sharing Good Practice (SGP)	Joint Practice Development (JPD)	
Largely unilateral, rarely interactive	Often bilateral, always interactive	
Seldom innovative for both parties	Always innovative for both parties	
Supposedly runs down from success	Builds up from what is not working	

Table 1. Comparing SGP and JPD (Patzer, 2020)

As highlighted by Donelan & Kear (2023), explorations into collaborative online learning within higher education have yielded significant understanding of the challenges encountered by both students and instructors. These challenges encompass issues such as diminished student participation and suboptimal levels of student contentment. Certain research endeavors have proposed remedies or suggestions, often aiming to enhance various facets of the educational experience: be it augmenting student engagement, refining student perceptions and satisfaction, or fostering student performance and skill advancement. As the prevalence of online education continues to surge, there arises a pressing need to methodically amalgamate this corpus of research. Doing so would facilitate the extraction of cogent insights for educators. The imperative lies in devising efficacious methodologies for online group collaboration to ensure that students can adeptly cultivate skills in virtual realms that were hitherto nurtured through on-campus interactions. This endeavor is paramount in ensuring that the transition to online modalities does not compromise the quality and efficacy of skill acquisition and development among students.

# PART II. STUDENTS' ATTITUDES TO DISTANCE LEARNING

In an era defined by rapid technological advancements and global connectivity, the landscape of education has undergone a transformative shift, with online learning emerging as a prominent and indispensable facet of the educational paradigm. As the world grappled with unprecedented challenges, particularly in the wake of the COVID-19 pandemic, educators and students alike found themselves navigating uncharted waters in the realm of virtual classrooms. Against this backdrop, this research about students' attitude towards online learning, delves into the multifaceted realm of online education, specifically focusing on the intricate tapestry of student attitudes towards this burgeoning mode of learning.

The allure of online education lies in its accessibility, flexibility, and the potential to transcend geographical boundaries, offering students the opportunity to engage with educational content from the comfort of their homes. However, this paradigm shift raises pertinent questions about the efficacy of virtual learning environments, the dynamics of student-teacher interactions, and the overall impact on the educational experience. Addressing these inquiries, the study embarked on a comprehensive exploration, seeking to unravel the nuances of student attitudes towards online education.

Through meticulous analysis, encompassing diverse demographic variables, technological proficiencies, and learning preferences, it illuminates the intricacies of how students perceive online education. By delving into their motivations, challenges, and the factors influencing their engagement, the research was to provide valuable insights that not only shed light on the state of online learning but also pave the way for enhancing its effectiveness and inclusivity.

This part of the study aimed to understand students' attitudes towards distance learning at Ferenc Rákóczi II Transcarpathian Hungarian College of Higher Education and Uzhhorod National University through an attitudinal survey. The research aimed to determine the impact of students' attitudes to the learning process during online education. The main questions include the students' attitudes towards distance learning, the differences in attitudes before and after distance learning became an important part of our lives, and the differences between these educational establishments. It focused on students' methods and "survival" abilities in virtual learning. Successful virtual learning requires greater student initiative and effort, and students lacking self-regulation abilities may struggle to succeed. Three research hypotheses were formulated: there are significant differences in students' attitudes towards online education, most students' attitudes are positive, and a small number of students are not satisfied with online education.

The study was limited to students at Ferenc Rákóczi II Transcarpathian Hungarian College of Higher Education and Uzhhorod National University and the results may have been different if students from other higher educational institutions were involved. The findings have important pedagogical implications for the future, as educational institutions can decide on the most effective methods and learning forms for their students, benefiting both students and teachers.

As it was already mentioned, students from the Ferenc Rákóczi II Transcarpathian Hungarian College of Higher Education and Uzhhorod National University took part in this study. As a new semester began, the prepared questionnaire was delivered to various students from both higher educational establishments, as well as published on multiple social media platforms, so that as many individuals as possible could fill it out. All of this was accomplished by completing an online questionnaire throughout the second semester of the academic year 2022/2023. The participants provided the project with information from the preceding two years via the aforementioned survey, assisting with deductions. To avoid misunderstandings, a dual-language questionnaire with questions written in both Hungarian and Ukrainian was designed for respondents.

The questionnaire was completed by 37 people. Approximately 78 percent of the research participants were female, whereas 22 percent were male. Furthermore, the majority of students (about 43%) were between the ages of 19 and 20 (the final year of their bachelor's degree studies). (See Table 2 for an overview.)

Gender	Number of learners (N=37)	Percent (%)
Female	29	78.4%
Male	8	21.6%

## Table 2. Participants' data

Ages		
16-18 years old	7	19%
19-20 years old	16	43%
Over 20 years old	14	38%
University		
Ferenc Rákóczi II Transcarpathian Hungarian College of Higher Education	18	48.6%
Uzhhorod National University	19	51.4%

The anonymous internet survey started with a brief cover letter explaining the goal of the study and assuring participants of their confidentiality. Certain personal information from respondents was sought at the start of the survey in order to make statistically valid assumptions about the students' age, gender, and current educational context.

Then, in the next section, the respondents were asked whether they agreed or disagreed with open statements about the practical application of distance learning, with choices such as: how successful they were in developing themselves; what effect spending all day in front of a computer or mobile device had on both their mental and physical well-being; what percentage of their time was spent preparing for classes; if they had the appropriate equipment in their home for distance learning, and so on. Furthermore, students were given the opportunity to express themselves without relying on the response options with an overview question at the conclusion.

The student replies were submitted to quantitative and qualitative analysis. These data analysis approaches were employed in tandem to assist the research in gaining insights from various data kinds. For the table samples, quantitative research was done to display analytics so that readers may comprehend the work better just simply by looking at the numbers. The qualitative technique was utilized to allow pupils to examine topics in greater depth through words.

While traditional classrooms appeared to be indispensable at first, a greater number of students' passion, positive attitudes, and openness to take part in distance education classes indicate a more promising future for online websites, different platforms, online educational tasks, and games in higher education institutions.

The results speak for themselves: around 5% stated that distance learning had not benefitted them at all, while 46% believed that the preceding two years had been adequate and beneficial to their advancement. Furthermore, 38% of people say that the previous years were just marginally effective. In terms of unfavorability, the majority dominates with 43%; these students just minimally felt the drawbacks of distance learning, however 27% were happy with the time spent online.

During distance learning	Very	Adequate	A bit	Not at all
Effectiveness	11% (4)	46% (17)	38% (14)	5% (2)
Disadvantage	19% (7)	27% (10)	43% (16)	11% (4)
Productivity	19% (7)	60% (22)	16% (6)	5% (2)

Table 3. Short-answer results 1. Assessing Distance Learning Impact

The majority of students agreed on an increase in productivity, with 22 feeling engaged during online education, accounting for 60% of responses. Six, or the 16% seen in the data table, reflect the number of individuals who felt very productive, and two farther away with identical numbers represent those who felt just slightly satisfied throughout digital learning. Because participants also offered comments on additional particular questions related to the broad online education concept, the attached table clarifies the findings. Slightly more than half of the university students, 51 percent, had to have the instruments required for this form of modern education. Computers and telephones were examples, but electricity, field strength, and wireless internet were other examples. At the same time, 35% only approved somewhat with this assertion, which may be clarified through the absence of the remaining three items on the list of requirements.

Even if a student knows the topic, nothing causes more nervousness than delivering an assignment in front of the entire class and teacher. This assertion was now backed up by the students that assisted in the execution of this project. Some of them, more specifically 43% believed that distance learning is less stressful than inperson education. The outcomes were associated with related thought-blocking, greater self-focused attention, and bodily effects such as blushing and stammering. These can have an effect on their classroom performance and academic achievement.

Better performance can be connected to a decrease in stress, since nearly 38% of students selected the "Partially agree" option.

Making up for backlogs was also included in the questions, and the majority of respondents agreed with the assertion that there was more possibility for this during distant education. As a result, over 30% of respondents agreed completely and 35% agreed somewhat with the notion. Only five people disagreed with this totally.

During distance learning	Completely agree	Partially agree	I can neither deny nor confirm	Partially disagree	Do not agree at all
Presence of technical conditions in the household	51% (19)	35% (13)	11% (4)	3% (1)	
Less stress	43% (16)	19% (7)	22% (8)	5% (2)	11% (4)
Opportunity to catch up on the backlog	30% (11)	35% (13)	16% (6)	5% (2)	14% (5)
Better performances	24% (9)	38% (14)	22% (8)	5% (2)	11% (4)
Decreased motivation to learning English	8% (3)	30% (11)	22% (8)	8% (3)	32% (12)
Usefulness of online resources in learning English	32% (12)	32% (12)	27% (10)		8% (3)
Increased	38%	22%	8% (3)	19%	13%
motivation	(14)	(8)	070(0)	(7)	(5)

 Table 4. Short-answer results 2. Factors influencing distance learning

 experiences

Students were given increased incentive during digital education for language acquisition, notably English language learning. The 32% displayed in the table shows 12 students, as well as how many did not agree with the assertion that 'Learning English online reduces my interest and drive to learn English'. This finding may also be explained by the following remark in the questionnaire: the depth of online literature and assets provided them with greater support and benefit, hence they felt more readily 'wanting to learn'. This remark was supported by 24 individuals, while

three people strongly disagreed. The remaining 27% were unable to dispute or defend the allegation.

A bigger number of participants (38%) studied three or four hours a day during home study, while another 22% study up to four hours, which was an appropriate and legitimate amount of time given that presentations and assignments did not cease throughout online education, and being wiser was always a good thing. When students were asked about the benefits of online education, they developed varied viewpoints, as shown in Figure 1.

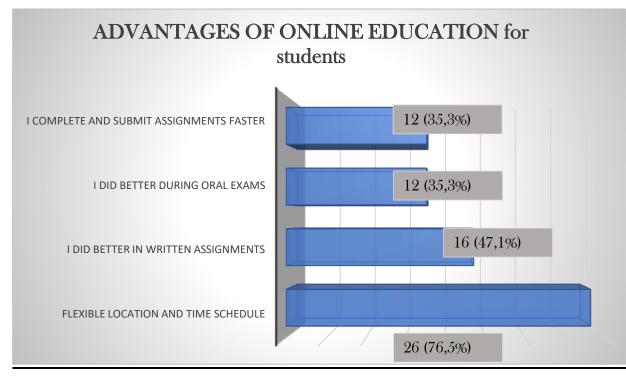


Figure 1. What advantages did digital education offer students?

The biggest advantage was the flexibility (flexible location and time schedule) with 76% vote advantage.

For the multiple-choice questions, students could select various alternatives from those provided. Based on this, it can be confidently asserted that challenges such as back discomfort and eye pain could make online learning difficult, as acknowledged by 70% of students. Another thing to note was that the option labeled "technical problems" was in second place with 50% of the vote. Power disruptions exacerbated the situation, as there was no distance education without energy. Figure 2 depicts further information.

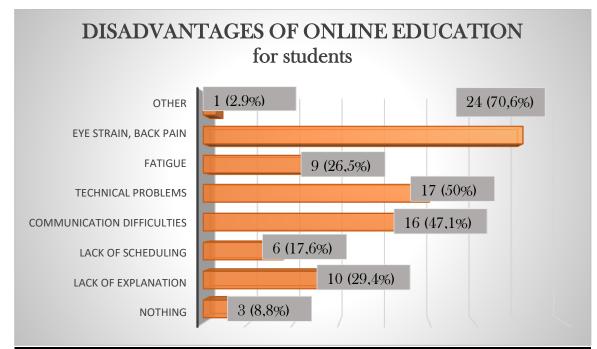


Figure 2. What caused problems in online education?

When asked to name three good and three negative aspects of remote learning, the replies did not differ significantly. One of the students made a broad, general statement, her answer summarized several statements that appeared in the opinions of other respondents.

"Positive: no one disturbs the study, there is adequate silence and I don't have to take care of the meals. You don't have to travel and I prefer the comfortable home environment.

Negative: Lack of contact, lack of a classroom lesson (we were able to connect better with the topic of the lesson during offline), lack of time (the teacher had less time to explain the topic). The decrease in our level of knowledge."

Flexible scheduling, improved performance, higher grades, the warmth of home, and reduced stress were frequently mentioned as good features.

Some students also acknowledged the benefits of the Internet world.

"The course material can be searched and repeated any number of times (e.g. Moodle)."

"You could even look up what you don't know during a lesson."

"I am informed by a wide range of internet sources."

"There are more sources on the Internet."

The most unfavorable replies included a lack of student life, absenteeism due to power outages, and the emergence of different health concerns as a result of computer use.

"Positive: no need to travel, no need to get up so early, more free time. Negative: frequent internet problems, lack of company, eye strain."

Lastly, there was a summary question, "Overall, are you satisfied with the online education?" to which nearly 51% of the students responded with Rather yes, 19% with a clear Yes, and 24% with Rather not. Despite the downsides, the vast majority of respondents felt that all aspects of distant education were suitable for them - on this basis, it is possible to determine which style of education is more suitable for people who want to study.

Now that there is written proof showing the majority of students' desire for online education, it can be stated that these two institutes are no different from the majority of international study findings. We can clearly see the benefits of this type of learning, which I would summarize as "flexibility, freedom" – which is what young people appreciate most now. In what follows, the three key themes addressed by the research study will be discussed in accordance with the results of the questionnaire administered to research participants.

What is the students' attitude towards distance learning at Ferenc Rákóczi II Transcarpathian Hungarian College of Higher Education and Uzhhorod National University?

It would be a mistake to pretend that virtual schooling did not begin slowly and with difficulty for all of us, but as tough as it began, teachers and students quickly learned to apply the general and technological skills necessary for digital learning. Even though research participants from both institutions provided positive and negative comments on this issue, the majority of students had a favorable, satisfied attitude toward online education. This positive answer was substantially backed by the fact that the students' homes provided the essential technical infrastructure for distance learning, as evidenced by the fact that half of the respondents agreed completely and the other half agreed slightly.

To emphasize a medical student's remark, they stated that the reason they were so hopeful about remote education was because of the flexible schedule: "During weekdays, students have the chance to work and engage in other activities since doing both while simultaneously studying during the day is just impossible. They le arn about a place relevant to or unrelated to their career as a consequence, which helps them unwind and recharge. On the one hand, learning is simpler in this form at since I can take as much time as I need to comprehend the information (anonymous)."

Are there any statistically significant differences in students' attitudes toward learning before and after distance learning became an important part of our lives? What impact did it have on the students?

After the advent of distant education, students' attitudes changed significantly, not just toward studying itself, but also toward acquiring the English language, and this quandary was resolved by a resounding yes in the questionnaire. The students noted remarkable benefits that helped them assimilate new knowledge and study materials, but they also got stronger apart from the field of science: some of them highlighted harmonizing their emotional states in the field of online tests, presentations, and so on. The stress element for students grows in face-to-face education, and nervousness emerges, but appearing in front of a computer is less terrifying, so every student has the chance to develop properly.

Many of the participants stated that learning is simpler since there is a bigger variety of vast Internet resources, self-scheduling allows for more time for everything, and finishing and handing in assignments is faster.

The questionnaire's final job included an opinion-explanatory question in which respondents were provided with the option to expound on their prior replies with their personal experiences. One student stated that the major downside of switching to online school was an absence of motivation:

"The biggest disadvantage for me was that I felt lonely and didn't have the desire to achieve. That's something I felt in the classroom; that I wanted to be better than the others. This had an effect on me that prevented me from studying as diligently as I should be very often (anonymous)."

Many students probably felt the same way, and that many may have lost their natural competitive drive as a result of a lack of interaction. However, with the approach of turning on video cameras during lectures, or with the teachers' online tasks/interesting activities, and newer and newer digital ways, this weakness might likely be practiced throughout time.

Are there any statistically significant differences in students' attitude towards distance learning between these universities?

Both parties received positive and negative replies, indicating that students filled out the questionnaire thoughtfully and in accordance with their own opinions. The winning team on both sides was unquestionably the one that strongly supports the continuance of online education.

Prior to the start of the study, three research hypotheses were formulated that required to be confirmed or refuted by the findings:

H1 There are significant differences in students' attitudes towards online education.

Although there were unique and equal opinions in the response box, this statement is correct in that the students answered the questions based on their own beliefs, which means that everyone found various methods to describe their opinions, and some viewpoints overlapped.

H2 Most students' attitudes towards online education are positive. The research confirmed that this assertion was correct. 51% of students said "Rather yes," while 19% said "Definitely yes."

H3 There is a small number of students who are not satisfied at all with online education.

The third and final theory was proven to be incorrect. When asked if they were pleased with remote education overall, 24% said 'Rather not,' while none said 'Not at all,' indicating that this premise is technically false.

Both institutions supplied both favorable and negative remarks on this issue, based on the fact that all respondents filled out the study questionnaire attentively and according to their own opinions. Yet, an overwhelming number of students were enthusiastic about online education. The fact that half of those surveyed agreed completely and the other half agreed somewhat that their homes provided the necessary technical infrastructure for this type of learning helped to explain why their opinions toward remote learning were usually positive. The students saw significant benefits that helped in their integration of new knowledge and study materials, but they also grew stronger outside of the science area. A few of them underlined the need for mental balance in the context of online examinations, presentations, and so on. Students endure greater stress and anxiety while studying in person, but everyone has the opportunity to reach their full potential when learning in front of a screen since it is less frightening. Several participants agreed that learning is easier because there is a greater range of online resources, that self-scheduling allows for more time for everything, and that finishing and submitting tasks is faster. Additional outcomes:

- The greatest advantage was adaptability with 76% vote advantage.
- Two of the three hypotheses were proven to be correct, indicating that there are considerable disparities in students' attitudes, beliefs, and viewpoints, yet the majority of them love digital learning. The data and research results refuted the third hypothesis.
- The goal was to determine the students' attitudes toward distance learning at Ferenc Rákóczi II Transcarpathian Hungarian College of Higher Education and Uzhhorod National University, both of which were successful.

These findings have substantial long-term implications because they enable educational institutions to make educated judgments regarding how they can most effectively train their students and deliver innovative learning experiences that all students will value. It will be easier to put in place a system that will benefit both students and teachers.

In concluding the exploration into students' attitudes towards online education, a wealth of insights that shed light on the intricate relationship between students and virtual classrooms has been unveiled. As we transition from this study, poised on the precipice of a new academic inquiry, our focus pivots towards understanding the other crucial half of the online learning equation: the teachers. Just as students bring their unique perspectives, challenges, and expectations to the virtual table, educators, too, have their own set of experiences, concerns, and innovative practices in the realm of online teaching.

By embarking on this next research endeavor, delving into "Teachers' Attitudes towards Online Education," the aim is to create a holistic tapestry that intertwines the perspectives of both learners and educators. Through this comprehensive approach, the target is to aspire to bridge gaps, foster meaningful dialogues, and ultimately, contribute to the evolution of online education. Understanding the symbiotic relationship between students' and teachers' attitudes holds the key to designing more effective and engaging virtual learning environments. Delving into this new phase of exploration, this research is poised to unravel a wealth of insights that will not only inform educational practices but also pave the way for a future where online education is not just a contingency plan but a thriving, innovative, and inclusive educational paradigm.

# PART III. EMPIRICAL RESEARCH METHODOLOGY ON TEACHERS' ATTITUDES TO DISTANCE LEARNING

#### **3.1 Participants**

The survey encompassed a diverse range of teachers in terms of age, gender, subject area and institutional affiliation, providing a comprehensive view of attitudes towards online education. The participants of this research were all teachers from the Ferenc Rákóczi II Transcarpathian Hungarian College of Higher Education and Uzhhorod National University. Surprisingly, 75% of the 24 instructors who completed the questionnaire were female, whereas just 25% were male. Additionally, the majority were between the ages of 35 and 45 (50%), followed by those over 45 and instructors aged 21 to 35. The following table contains information about the respondents from the two universities, see the summary in Table 5.

Gender	Number of educators (N=24)	Percent (%)
Female	18	75%
Male	6	25%
Ages		
21-25 years old	-	-
25-35 years old	3	12,5%
35-45 years old	12	50%
Over 45 years old	9	37,5%
University		
Ferenc Rákóczi II Transcarpathian Hungarian College of Higher Education	19	79,2
Uzhhorod National University	5	20,8

Table 5. Participants' data

It is evident that the teachers who participated in the survey represent a diverse range of academic disciplines and professional expertise. These disciplines include Philosophy, International Economics, English language and literature, History of international relations, Biology subjects, Hungarian literature, Hungarian grammar, Hungarian language history, Stylistics, Literary language history,

Hungarian language as a foreign language, Stylistics, Rhetoric, Sociolinguistics, Contactology, Theory and practice of editing, Pedagogy, Sociology of Education, Scientific research, Dialectology, Grammar, German language and literature, Introduction to Linguistics, Workshop on oral and written communication, Foreign language (English), Intercultural communication, Designing the educational process in educational institutions, Modern Ukrainian literary language, History, British literature, Psychology, English grammar, Professional English, Inclusive education Universal History: Recent Age; History of Hungary: recent era; Ethnic traumas in the XX. century in Central Europe.

#### 3.1.1 The Research Instrument: Questionnaire for teachers

The questionnaire was administered online using the free Google forms programme. Teachers were invited to take part in the survey during the two semester and gave their answers anonymously. Its administration took up to 15 minutes. The focus of interest were the attitudes of teachers of the Ferenc Rákóczi II Transcarpathian Hungarian College of Higher Education and Uzhhorod National University towards online classes.

Following this initial session, participants were able to rate their confidence and difficulties in their ability to teach effectively using distance learning platforms. They were given the opportunity to express their feelings through some statements, thus facilitating a nuanced exploration of their perspectives and experiences in this area. The available response options enabled a comprehensive understanding of the multifaceted dynamics surrounding the application of distance education methods. Just as in last year's research examining the attitude of students to online education, it was also possible to vote on various advantages and disadvantages of distance education in the questionnaire investigating the attitude of teachers.

In addition to multiple-choice questions, the questionnaire contained yes/no and several free-response questions. The free-response questions greatly helped the work in that the gray, monotonous, impersonal answer options provided in advance were given some kind of color and feelings.

#### **3.1.2** Procedures of the research

At the outset of the new semester, under conditions remaining unaltered, a questionnaire was distributed to numerous educators across two universities.

Simultaneously, efforts were made to amplify its reach by disseminating it across several social media platforms (Messenger, Viber, Gmail, Whatsapp), ensuring broad accessibility and participation. This concerted effort aimed to maximize the number of respondents and thereby enhance the richness and diversity of perspectives captured within the survey. The questionnaire, administered online during the initial semester of the 2023/2024 academic year, served as a pivotal tool for gathering comprehensive insights into the experiences and perceptions of educators. By reflecting on the past three years through their responses, participants contributed invaluable information that underpinned the formulation of informed conclusions and recommendations. To foster inclusivity and mitigate potential language barriers, a bilingual questionnaire was meticulously crafted, featuring questions presented in both Hungarian and Ukrainian languages. This thoughtful approach sought to accommodate the linguistic preferences and needs of respondents, ensuring clarity and facilitating meaningful engagement with the survey instrument.

#### 3.1.3 Data analysis methods

Quantitative analysis was instrumental in scrutinizing the numerical data gleaned from the structured components of the survey questionnaire. This method enabled the systematic examination of respondents' demographic information, attitudes, and perceptions. The quantitative approach provided a robust framework for identifying patterns, correlations, and trends within the dataset, thereby offering empirical insights into the phenomena under investigation.

The rationale behind employing quantitative analysis lies in its ability to yield precise, quantifiable results that lend themselves to statistical inference. By quantifying responses and demographic variables, we were able to generate quantifiable metrics and conduct statistical tests to ascertain relationships and associations between different variables. Furthermore, quantitative analysis facilitated the comparison of responses across different groups and aided in the identification of significant patterns or trends that may have emerged within the dataset.

In tandem with quantitative analysis, qualitative methods were employed to delve deeper into the nuanced aspects of participants' experiences, perceptions, and attitudes towards online education. Qualitative analysis involved the systematic examination of open-ended responses and textual data obtained from survey responses, interviews, or other qualitative data sources. This method enabled the exploration of rich, detailed narratives and the identification of themes, insights, and contextual nuances embedded within the qualitative data.

The decision to incorporate qualitative analysis stemmed from the recognition of the inherent complexity and diversity of human experiences and perspectives. Qualitative methods offered a means to capture the depth and richness of participants' responses, allowing for the exploration of underlying motivations, beliefs, and contextual factors shaping their attitudes towards online education. Through qualitative analysis, we aimed to uncover the subjective meanings and interpretations attributed to various aspects of distance learning, providing a holistic understanding of the phenomena under scrutiny.

By integrating both quantitative and qualitative analysis approaches, this research sought to leverage the respective strengths of each method while mitigating their inherent limitations. The complementary nature of these methodologies facilitated a comprehensive and robust analysis of the data, enriching our understanding of teachers' attitudes towards online education and yielding valuable insights for informing future educational practices and policies.

#### **3.2 Findings**

The findings from this study offer valuable insights into the complex and multifaceted nature of teachers' attitudes towards online education in the context of pandemics and conflicts. While many educators feel adequately prepared for the challenges posed by distance learning, concerns persist regarding academic integrity, mental health implications, and the efficacy of assessment using digital tools. Moreover, diverse perspectives regarding the potential of online education and preferences for teaching modes underscore the need for tailored interventions and support mechanisms to address the evolving needs of teachers and students.

A significant part of the respondents, i.e. 19 out of 24 people (of which three respondents marked the 'very' option) are confident in using distance learning platforms. While this proportion of teachers reported feeling adequately prepared and proficient in navigating online learning environments, the remaining five experienced concerns and uncertainty, indicating that further training and support is still needed in this area, meaning this problem can be fixed easily.

Coming back, since it was already mentioned that the majority think their teaching methods are appropriate, 17 people also considered the preparation for using these online tools to be adequate. In contrast, the minority, i.e. six people (25%) and one person (4.2%) chose Not really/No option.

Although the majority always wins, it should be noted that said minority is not that small after all, as this data is only valid for this research.

Similarly, according to the study conducted by Hopker, Atherfold, Bartlett, Ibrahim, Lynch, and Sureshbabu, the majority of teachers reported a notable improvement in their confidence levels regarding technology utilization following their completion of lesson visits. They highlighted that engaging in practical application of various tools, seeking assistance and guidance when needed, and observing the effective utilization of these tools by other educators significantly contributed to their enhanced confidence. This underscores the importance of hands-on experience, ongoing support mechanisms, and peer learning in fostering teachers' proficiency and confidence in technology integration within educational settings. (Hopker, Atherfold, Bartlett, Ibrahim, Lynch & Sureshbabu, 2021).

Participants emphasized the importance of collaboration and sharing of best practices among teachers in the world of distance education with 92% positive (Yes) voting results, and only 8% (two out of 24 people) who denied the need for cooperation.

According to Patzer (2020) engaging in collaborative endeavors between lead practitioners and teachers stands as a potent avenue for professional development, fostering enhancements in subject mastery, innovative teaching methodologies, and the exploration of fresh classroom techniques. It has been revealed that educators glean substantial insights from their peers, surpassing the benefits garnered from mentorship or conventional training sessions. Furthermore, the adoption of collaborative practices among teachers correlates positively with increased classroom innovation, fortified self-efficacy convictions, and elevated levels of job satisfaction. This underscores the transformative impact of collaborative learning environments on educators' professional growth and pedagogical efficacy.

The numerical data of the information mentioned so far can be viewed in Table 6 below:

During distance learning	Definitely	Yes or There is a chance	Not really / I don't care	No or There is no chance
Adequate training in online platforms	-	70,8% (17)	25% (6)	4,2% (1)
Cooperation and sharing of useful practices is necessary	-	91,7% (22)	8,3% (2)	-
Distanceeducationreplacestraditionaleducation	-	41, 7% (10)	-	58,3% (14)

#### Table 6. Short-answer results

The answers to the following two questions resulted in big differences, when teachers were asked how concerned were they about online education, first during the period of COVID and then during the initial period of the war, since in Ukraine there was also a short period of returning to traditional university life between the two events that changed people's lives.

In March 2020, most of the students were probably overjoyed when they heard the news that they did not have to go to university and that the Paradise of fun in the digital world of computers/phones was about to begin, but for most, especially older teachers, this did not mean such great joy.

First of all, it is worth considering that 33% of the respondents were 'Very' afraid of the introduction of online education before COVID, since before the pandemic it was not as widespread as the digital space in education has already developed, and 12.5% wasn't afraid of change at all. Another 33% of voters pressed 'A little' and 21% 'Not really'.

However, this answer changed significantly, when there was a retreat to prewar distance education, as it became exactly the opposite of the data of the previous question: 33.3% were 'Not at all' afraid to work with online tools again, but 12.5% remained, which choose the 'Very' option, 29% 'A little' and 25% 'Not really' options.

Age-wise the fact that older teachers were afraid of online teaching, was supported by the answers of those aged 35-45 and over 45. Among those who filled out the questionnaire, only three teachers were between the ages of 25-35, i.e. the youngest among the teachers, not surprisingly, recorded their experiences with online

education as positive, they were not afraid of the transition due to the pandemic and the war. See Figure 3 for proof.

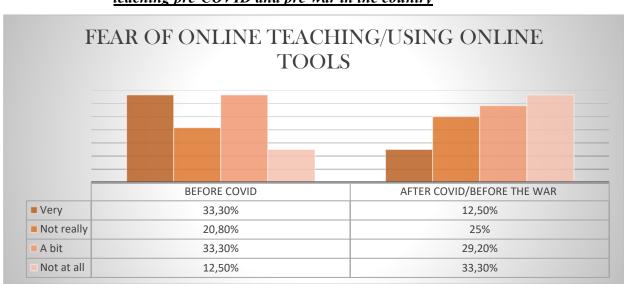


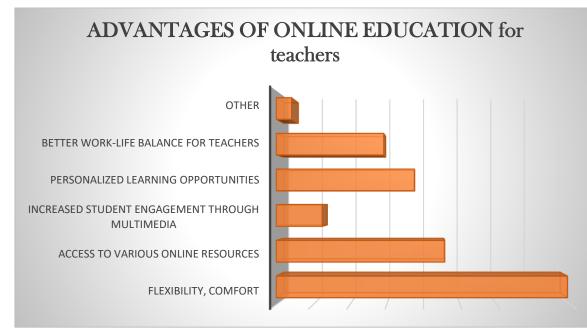
Figure 3. The difference between tertiary teachers' concern about distance teaching pre-COVID and pre-war in the country

Next, participants identified a range of advantages associated with distance education, including flexibility, access to resources, and personalized learning opportunities. 19 of the teachers voted for flexibility as an advantage, it seems that, considering last year's research, not only the students thought that the convenient time schedule and change of locations in addition to online classes is favorable.

Based on Myronov's & Myronova's (n.d.) short online article, one of the key advantages of distance learning is the ability for students to have full control over their study schedule. They have the autonomy to determine when and how much time they allocate to studying the course material throughout the semester, enabling them to craft an individualized study plan that suits their personal and professional commitments. Distance learning also eliminates geographical barriers, allowing students to pursue their education from any location worldwide, be it the comfort of their home, office, or any other convenient setting. All that is required to commence learning is access to a computer with an internet connection. This accessibility proves especially beneficial for individuals facing physical constraints, those residing in remote areas, as well as for parents with young children, who may find it challenging to attend traditional on-campus classes regularly. And, an appealing aspect of distance learning is the seamless integration with one's primary commitments. This flexibility allows individuals to pursue education concurrently with their professional

responsibilities, facilitating the opportunity to enroll in multiple courses or programs simultaneously, even across different educational institutions (Myronov & Myronova, n.d.).

Thanks to the results of this research, it was confirmed, in addition to the previous statements, that not only do the above apply to students, but teachers also feel the same way.



# Figure 4. What advantages did digital education offer teachers?

However, they also highlighted several challenges, such as limited interaction, technical issues, and difficulties in maintaining student engagement and motivation.

Not surprisingly, the problems with limited interactions (with a 87,5% voting advantage) seemed to win this fight. Grasping educators' viewpoints on digital interactions holds immense importance, given that their perspectives profoundly shape how they approach teaching. The dynamics and quality of online exchanges in educational settings often reflect the teacher's involvement. Effective teacher facilitation is pivotal in fostering substantial collaborative engagements, empowering students to feel assured in their interactions with classmates. This underscores the pivotal role of educators in cultivating a conducive online learning environment (Gao & Shi 2023).

In her study, Wong (2005) conducted a comparative analysis of how future educators perceived teacher-student interactions in both face-to-face (F2F) and online asynchronous segments of an introductory education course. Her findings shed light on the central role of teacher-student relationships in the teaching and learning journey, highlighting the significant impact of these interactions. Penelope's research provided evidence supporting the notion that teacher-student interaction, particularly in the online realm, positively influences students' levels of engagement and motivation. This underscores the importance of fostering meaningful interactions between teachers and students, irrespective of the learning environment. Furthermore, Wong's (2005) preliminary investigation delved into the perceptions of both online and face-to-face students regarding teacher-learner interactions, adding another layer of insight into the dynamics of educational engagement across different instructional formats.

Therefore, it can be confirmed that it is not a new topic or, more importantly, a problem, several studies prove the frequency of its occurrence.

A substantial portion of respondents (62.5%) expressed concerns about the restricted ability to conduct hands-on activities and group projects in distance education settings. This limitation impedes the practical application of concepts and collaborative learning experiences typically facilitated through in-person interactions. Even though advancements in technology have enabled a wide range of online teaching tools and platforms, certain practical activities or group projects may be challenging to implement due to technological limitations. For example, hands-on laboratory experiments or art projects may require specialized equipment or materials that students do not have access to remotely.

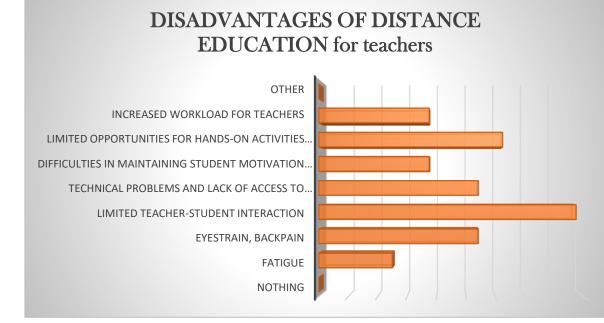
Another proportion of respondents (54.2% each) highlighted physical discomfort such as eyestrain, back pain, and fatigue as significant drawbacks of distance education. This underscores the importance of ergonomic considerations and strategies for mitigating health-related issues associated with prolonged screen time in online learning environments.

The respondents (54.2%) also had issues with technical problems and lack of access to devices/internet as challenges in distance education, which indicates that infrastructure-related issues can hinder the smooth implementation and accessibility of online learning platforms, particularly for students from underprivileged backgrounds.

Teachers voted the same amount of numbers for (37.5%) difficulties in maintaining student motivation and commitment and increased workload for teachers as a disadvantage of distance education. This highlights the importance of employing

effective instructional strategies and support mechanisms to keep both students and teachers engaged and motivated in virtual learning environments. The data can be viewed in the figure below:

# Figure 5. What disadvantages did digital education offer teachers?



Analyzing the responses provided by tertiary teachers regarding the most effective online platforms or tools for promoting distance learning reveals several key insights and trends:

- Preference for established platforms: Many respondents highlighted familiar and widely used platforms such as Google Classroom, Meet, and Zoom, which suggests a comfort level with tools that are already integrated into their teaching practices and have proven reliability.
- Versatility of communication tools: platforms like Google Meet and Zoom, which offer features such as video conferencing and chat functionality, were frequently mentioned and that underscores the importance of effective communication tools in facilitating teacher-student interaction and collaboration in virtual learning environments:

"Meet is great, the use of the chatbox is also possible when e.g. a student's microphone is not working or Zoom, where breakout rooms can be created for group work."

Emphasis on Learning Management Systems (LMS): several respondents emphasized the effectiveness of Learning Management systems (LMS) such as Moodle and Microsoft Teams. These platforms were praised for their ability to streamline course materials, monitor student progress, and facilitate teacher-student communication.

"The use of learning management systems (LMS) is very effective because they help both the student and the teacher to monitor the student's progress. Through these, teacher-student communication can also be easily realized."

Convenience and organization: teachers highlighted the convenience and organizational features of platforms like Google Classroom, which allow for the centralized management of study materials, submissions, and communication. This reflects a desire for platforms that simplify administrative tasks and enhance efficiency in online teaching:

"I would say Classroom, because we can organize the study materials and submissions in one place. And everything can be retrieved at any time. It can also be used well in terms of maintaining contact."

"Google Classroom would be my answer. Everything you need for contact, information exchange and reporting is available there, the rest is a function of the human factor."

- Support for collaborative activities: Some respondents mentioned features like breakout rooms in Zoom and collaborative tools like Kahoot and Forms, indicating a recognition of the importance of facilitating interactive and engaging learning experiences through online platforms.
- Consideration of accessibility: Platforms like Messenger and Viber were mentioned by a few respondents, suggesting a consideration for alternative communication channels that may be more accessible to certain students or conducive to specific learning needs.

The teachers' responses highlight the importance of selecting online platforms and tools that align with their pedagogical goals, support effective communication and collaboration, and enhance the organization and efficiency of distance learning processes. This underscores the need for educators to have access to a diverse range of digital tools and platforms that cater to the diverse needs and preferences of both teachers and students in virtual learning environments. Additionally, the findings emphasize the ongoing importance of professional development and training to ensure that teachers are proficient in utilizing these tools effectively to optimize the online learning experience. Next in line was analyzing the responses provided by tertiary teachers regarding the strategies they found most successful in keeping students engaged in online classes, which yields several insightful observations:

Emphasis on continuous feedback and communication: many respondents emphasized the importance of maintaining active communication with students and providing continuous feedback. Strategies such as frequent discussions, personalized tasks, and addressing questions in real-time contribute to fostering a sense of connection and engagement among students.

"I always make sure to give feedback and maintain active communication. I think these two are at the top on the list, If we're talking about strategies."

"Continuous discussion of the questions that arise are really important."

Utilization of interactive and collaborative activities: several teachers highlighted the effectiveness of interactive and collaborative activities in keeping students engaged. This includes strategies such as small group discussions, interactive lessons, and cooperative learning tasks, which promote active participation and peer interaction.
 *"My strategy is simple: Do not to let students turn off their camera, cooperate with*

them; lessons should always be interactive!"

Motivation and goal setting: teachers recognized the significance of motivating students and setting common goals to guide their learning journey. Strategies such as emphasizing the common goal, rewarding class participation, and providing psychological support contribute to cultivating a positive learning environment and enhancing student engagement.

"The success of the tested strategies was always determined by the given circumstances and the student's motivation for learning. "If someone wants to do something, they look for the opportunity, if not, then the excuse". Rewarding class participation (login) with points has proven to be quite effective."

"I made them feel that I was 'there', they could reach me at any time through the various channels, and my students often took advantage of this."

Individualized approaches: some respondents emphasized the importance of tailoring teaching strategies to meet the individual needs and motivations of students. Personalized tasks, addressing students by name, and providing individualized feedback contribute to creating a supportive and inclusive learning environment that fosters student engagement.

"I would say, assignment of personalized tasks, questions by name."

Consistency and accountability: strategies such as tracking attendance, consistent compliance with requirements, and implementing the question-answer method help maintain accountability and structure in online classes. Consistency in communication and expectations contributes to establishing a sense of routine and clarity for students.

"I use question-answer method, which I recommend to beginner teachers that are also new to the digital world."

"Feedback, questions related to the curriculum wall continuously in class."

Flexibility and adaptability: teachers acknowledged the importance of flexibility and adaptability in implementing successful engagement strategies. Recognizing that the effectiveness of strategies may vary depending on the circumstances and student motivations, teachers emphasize the need to remain responsive and adaptive in their approach to online teaching.

"In my view, this topic is very student-dependent. We have to try everything out first with every class, because one method or the mix of three or four methods will not be successful with all student groups."

The responses underscore the complexity of student engagement in online classes and stress the significance of using a variety of strategies to meet different student needs. Prioritizing ongoing communication, interactive tasks, personalized assistance, and goal-focused methods can help educators develop dynamic and stimulating learning environments that enhance student achievement in virtual settings.

When the teachers were asked what additional support do they think students need in the distance learning environment, the answers were all similar to one another:

 Emotional support – most of the answers consisted of the importance of emotional support for students, highlighting the need to reassure them that assistance is available whenever they encounter challenges in their studies.

"Mostly emotional. We must assure them that they can turn to us for help at any time if they are stuck in their studies."

"Emotional support! Convincing the student in personal conversations that they are not alone in learning, that the teacher is not an enemy, but a partner in this process, and that their knowledge increase is a value!" Technical support – in the second place, several teachers noted the need for technical support to address issues related to technology and digital infrastructure.
 *"Technical equipment support!"*

"There are students who performed very well in class in face-to-face education, but when distance education started due to the epidemic and then the war, not all of them could finance online learning. I support e-learning but we have to think about these students too."

 Individualized assistance: respondents highlighted the importance of providing students with personalized explanations and consultation opportunities.

"They are always willing to accept extra funds, and even ask for them themselves, if they feel that the material they have received is not sufficient."

"In any case, it is necessary to provide the students with more careful and detailed explanations and to provide them with individual consultation opportunities." "Additional learning opportunities, regular feedback!!"

 Motivational support: many teachers recognized the importance of maintaining students' motivation and engagement in the distance learning environment. Strategies such as providing regular feedback, offering additional learning opportunities, and emphasizing the value of knowledge acquisition contribute to fostering student motivation and commitment to learning.

"Perhaps the emotional impact, motivation is very important." "Students lose their motivation more easily, so motivational support."

Crisis-related support: some respondents mentioned the need for emotional support in response to specific crises or challenges, such as the outbreak of war, which highlights the importance of acknowledging external factors that may impact students' well-being and academic performance, and providing appropriate support and resources in such situations.

"In the case of some students, technical support is also necessary. Depending on the reason for distance learning, emotional support is also necessary in some cases, e.g. the fact that distance learning itself began a few days after the outbreak of war meant stability for the students in many ways, a kind of proof that the system to which it belonged until now would not fall apart. In my opinion, indicating additional learning resources is always necessary in the case of distance learning."

By recognizing and addressing these needs, educators can create a supportive and inclusive learning environment that fosters student success and well-being in virtual settings. After all, one of the main tasks of this research is to serve as an overview guide for students, teachers and educational institutions alike, once it has successfully completed its goal.

The responses from tertiary teachers regarding whether distance education can replace traditional education provide valuable insights into their perspectives on the potential of online learning to supplant traditional classroom-based instruction.

The majority of teachers (58.3%) expressed the view that distance education cannot replace traditional education. This suggests a strong belief among these educators in the enduring value and irreplaceability of face-to-face, in-person learning experiences. Reasons for this perspective may include concerns about the limitations of online learning in fostering interpersonal interactions, hands-on practical experiences, and the social and emotional aspects of learning that are integral to traditional education settings.

The minority of teachers (41.7%) acknowledged the possibility that distance education could have some degree of efficacy in replacing traditional education. This suggests a recognition among these educators of the potential benefits and opportunities offered by online learning, such as flexibility, accessibility, and the ability to reach a wider audience. However, they may also acknowledge the current limitations of distance education in fully replicating the immersive and holistic learning experiences provided by traditional classroom settings.

It is noteworthy that none of the respondents selected "Definitely" or "Yes" as their response. This could indicate a level of skepticism or caution among the teachers regarding the feasibility or desirability of fully replacing traditional education with distance education. Possible reasons for not choosing these options may include concerns about the quality and effectiveness of online learning, the importance of preserving the unique benefits of face-to-face instruction, and a recognition of the ongoing challenges and barriers to achieving parity between distance and traditional educational modalities.

Regarding the long-term effects of distance learning in the field of education, respondents expressed a mix of both positive and negative perceptions. While some highlighted the potential for improved digital competencies and increased flexibility, others raised concerns about the erosion of personal relationships and the negative effects on communication and social interaction:

"It is a two-way thing: the positive effect is that the students (and partly also the lecturers) can develop better digital competences, and the negative effect is the loosening of direct personal relationships."

"There are already clear signs. The pandemic forced the world to distance learning. However, the consequence of this today is that there are American university students who refuse to attend face-to-face classes and demand the official introduction of distance education. This is also conceivable in Ukraine in the future."

There were concerns about the potential negative impact of distance learning on personal relationships and communication skills. They noted that the lack of faceto-face interaction could lead to superficial relationships and hinder students' ability to effectively communicate and collaborate.

"New methods are appearing that aim to increase the efficiency of distance education. The lack of a presence relationship between people will have a negative effect on the students' presentation and communication, as they perform and perform all their tasks sitting in front of the monitor."

"I hope I don't have to use it in the future. It feels like talking to a wall."

Many respondents noted the increasing integration of technological tools in everyday education and the potential for distance learning to become more prevalent in the future. Some highlighted the shift towards online courses (MOOCs) and the growing demand for distance education among students, particularly in the context of the COVID-19 pandemic.

"I think this is the future. There are already a lot of online courses (MOOCs) and we hear more and more news that many students in the USA are asking to learn via distance learning."

Teachers raised concerns about the challenges of assessing students' knowledge and performance in a distance learning environment. They noted the difficulty of accurately gauging students' understanding and progress without the benefit of in-person interaction and observation.

"It is less possible to assess the level of students' knowledge." "Distrust is now bigger than it ever was before."

There was a sense of uncertainty among some respondents regarding the longterm implications of distance learning. While some expressed optimism about its potential, others voiced skepticism or discomfort with the idea of relying solely on online teaching methods. Then thought-provoking and interesting statements were presented for the participants which can be seen in Table 7.

The majority of them (83.4%) expressed some level of agreement with the statement that students learn less during distance education. This suggests a widespread belief among the participants that remote learning may present challenges in delivering educational content effectively and facilitating meaningful learning experiences.

Moving on, (70.8%) indicated some level of agreement with the statement that there is more academic dishonesty, such as cheating and plagiarism, in online courses. This reflects concerns about the potential for increased opportunities for cheating and the difficulty of monitoring student behavior in virtual learning environments.

A majority of participants (100%) agreed, either fully or partly, with the statement that there is a greater chance of developing depression, depersonalization, and anxiety during distance education. This highlights concerns about the potential impact of remote learning on the mental well-being of both students and teachers, particularly in the context of increased social isolation and stressors associated with online education.

Participants expressed mixed views on the ease of assessing students' knowledge using digital tools, with equal proportions indicating agreement and disagreement with the statement. This suggests variability in participants' experiences and perceptions regarding the effectiveness of digital assessment methods, with some finding them easy to use and others encountering challenges or limitations.

Statements	Fully	Partly yes	Partly not	Not at all
Students learn less during distance education	16,7% (4)	66,7% (16)	8,3% (2)	8,3% (2)
Thereismoreacademicdishonesty(cheating,plagiarism)inonline courses	25% (6)	45,8% (11)	16,7% (4)	12,5% (3)
During distance education there is a	25% (6)	75% (18)	0% (0)	0% (0)

Table	7.	Statement-g	uestions

greater chance of developing depression, depersonalization and anxiety (both among teachers and students)				
It is easy to assess students' knowledge using digital tools	16,7% (4)	33,3% (8)	25% (6)	25% (6)
It is easy to assess students' knowledge using digital tools	16,7% (4)	37,5% (9)	25% (6)	20,8% (5)

The following was an important topic because maintaining a work-life balance is key. But how did these teachers manage their time and how did they avoid 'burnout' during online teaching?

Most of them had difficulty in avoiding burnout and indicated that they struggled to manage their workload effectively. This suggests that the transition to online teaching may have presented significant challenges and stressors for some educators, potentially leading to feelings of exhaustion and overwhelm.

"Failed to avoid burnout."

"I couldn't escape."

"It was difficult, I didn't even have time to eat."

They described implementing specific time management strategies to balance their professional and personal responsibilities. These strategies include sticking to pre-planned schedules, allocating time for work and family, and innovating teaching methods to improve efficiency.

"I tried to stick to a pre-planned schedule, which I tried to make somewhat colorful by alternating different types of activities."

"I tried to allocate my time rationally, I planned in advance when and how much time I would have for work and family."

Some teachers mentioned that they relied on pre-existing digital materials, such as PowerPoint presentations and videos, which facilitated the transition to online teaching and reduced the workload associated with developing new instructional content. "I already had a lot of digital materials (ppts, videos) before starting online teaching, so the transition to online education was not too difficult."

"I tried to innovate my lectures and presentations in order to be able to convey the material to my students as effectively as possible."

Also emphasized the importance of prioritizing personal well-being and maintaining relationships outside of work to prevent burnout. Strategies such as spending time with family, engaging in physical activities, and taking breaks were mentioned as ways to recharge and rejuvenate.

"I try to walk more after work."

"I spent my breaks with my family."

"I made time for family and friends"

"I tried to spend as much time as possible resting and regenerating and maintaining my human relationships"

"By challenging the various forms of activity and tasks. By releasing tensions in physical activities. The fun should not be in the online space!"

The importance of adaptability and continuous learning in navigating the challenges of online teaching was brought up. They recognized the need to remain open to new strategies and approaches, as well as the importance of ongoing professional development to enhance teaching effectiveness and resilience.

"You have to keep learning, even if it is difficult sometimes!"

While some educators found success in implementing structured schedules and prioritizing personal well-being, others struggled to adapt to the demands of remote teaching.

"During confinement at home, the time spent with the students gave more positive energy than the burnout would have threatened."

"Everything is just a matter of will, I think."

Analyzing the responses provided by the teachers regarding recommendations for handling situations where attendance or online teaching is disrupted by air raid warnings reveals a variety of perspectives:

Embracing distance learning: some teachers advocated for utilizing distance learning as a solution for such situations, emphasizing its asynchronous nature and flexibility, which allows students to continue learning even when direct instruction is not possible. "Distance learning is an excellent solution for the above cases, since it does not involve contact classes and students learn asynchronously when they have the opportunity."

"E-learning can be an excellent solution for such situations."

"Through the online interfaces, the course material can be made accessible, and with an increased work pace, it can obviously be discussed at times when there is no air raid warning."

Creating video lessons: suggestions were made to create video lessons that students can access during disruptions caused by air raid warnings. However, concerns were raised about the effectiveness of this approach, as there is no guarantee that students will watch the videos.

"You can make videos of the lessons. It is just not guaranteed that the student will watch it."

"Record the lesson."

Challenges with bunker teaching: several respondents acknowledged the challenges of conducting education in bunkers, noting that it may not be the most efficient or conducive learning environment.

"Teaching at the nursery is not the most convenient, but in the current situation we are forced to resort to it."

"It is quite difficult to solve, because the education process in the basement is not really efficient"

Importance of stress relief: recognizing the stressful nature of air raid situations, some teachers emphasized the importance of prioritizing stress relief and creating a supportive environment for students during such disruptions.

"You know that in stressful situations, cognitive abilities can work with limited efficiency, so in such situations, the main task is to relieve stress!"

"Unfortunately, the start or duration of air raids is unpredictable. The situation is stressful for everyone. In my opinion, if the air-raid alarm interrupts the class, it is difficult to continue after it ends, it is difficult to concentrate."

Utilizing available resources: suggestions were made to utilize available resources, such as internet access and digital devices, in daycare centers or bunkers to continue education during air raid warnings.

"Conditions should be created in the created bunkers so that education can continue there without any problems." "If the internet and digital devices are available at the daycare center, education can continue there as well."

Flexibility and adaptability: teachers highlighted the need for flexibility and adaptability in responding to unpredictable situations like air raid warnings, suggesting approaches such as sharing teaching materials or engaging in group work activities suited to the circumstances.

"If a suitable breathing space is available - obviously depending on the size of the group - the development of current group work and tasks that are suitable for practicing the previously learned material. With these, the hours burdened with air raids could be usefully spent."

"I follow the rule, I don't bring new ones. I can not."

"We try to adapt to the situation in which we are forced to work."

And the penultimate main question was the question of whether teachers would switch to full online education, the results are available below:

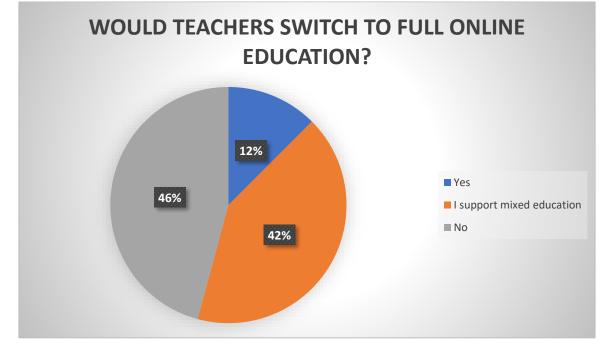


Figure 6. Switching to full online learning

The largest proportion of respondents (41.7%) expressed support for mixed education, indicating a preference for a combination of online and traditional inperson teaching methods, while another number of participants (45.8%) indicated that they would not switch to full online education. This suggests a reluctance among these teachers to completely abandon traditional classroom-based teaching in favor of remote learning. The rest (12.5%) expressed a willingness to switch to full online education, their responses indicate a degree of openness to embracing remote teaching methods.

#### 3.3 Discussion and interpretation of results of the research

As technology continues to advance, it brings about various impacts on human perception and behavior, both positive and negative. However, it is incorrect to attribute the emergence of online classroom settings solely to the onset of the pandemic. The significance of online teaching and learning had already been recognized prior to the epidemic. Initially, educators faced challenges adjusting to the online classroom environment, but as they spent more time teaching online, their experience and proficiency gradually improved. Nevertheless, not all teachers in Transcarpathia were fully persuaded by the introduction of this new technological aspect.

Three questions were set before writing the work, which awaited answers:

1. How do tertiary teachers perceive and engage with distance learning methodologies?

Many tertiary teachers perceive distance learning methodologies as both a challenge and an opportunity. While some embrace the flexibility and accessibility that online teaching affords, others may express concerns about the effectiveness of remote instruction in fostering meaningful learning experiences. Factors such as the nature of the subject matter, the availability of resources, and the level of support from institutions and students also influence teachers' perceptions and engagement with distance learning.

2. What factors contribute to the formation of these attitudes among both students and tertiary teachers?

The formation of attitudes among both students and tertiary teachers toward distance learning is influenced by a range of factors that include prior experiences with online education, beliefs about the role of technology in education, cultural norms, institutional policies, and external factors such as the COVID-19 pandemic and the current war in our country which has a huge influence on people's mental health.

3. Are there any statistically significant differences in teachers' attitudes toward learning before and after distance learning became an important part of our lives? What impact did it have on the teachers?

Examining statistically significant differences in teachers' attitudes toward learning before and after the widespread adoption of distance learning reveals valuable insights into the impact of this transition. Research suggests that the shift to online teaching has led to both positive and negative effects on teachers. While some educators have adapted well to remote instruction and embraced new technologies, others have faced challenges related to workload management, technological barriers, and maintaining student engagement. Now, educators have to reevaluate their pedagogical approaches, experiment with new instructional strategies, and seek professional development opportunities to enhance their skills in online teaching.

This paper aims to delve into three primary topics, aligning with the insights gleaned from the questionnaire administered to the research participants. Through this exploration, we seek to provide a comprehensive understanding of the issues at hand and their implications in the context of online education.

#### H1 Most teachers' attitudes towards online education are negative.

Based on the provided results, the hypothesis that most teachers' attitudes towards online education are negative does not seem entirely accurate. While there is evidence of some challenges and reluctance among teachers regarding a complete switch to online education, the data also shows that a significant portion of teachers expressed a willingness to switch to full online education, indicating openness to remote teaching methods. Additionally, many teachers implemented strategies to adapt to online teaching, such as using pre-existing digital materials and developing time management techniques. Some even advocated for embracing distance learning as a solution for disruptions like air raid warnings, highlighting its asynchronous nature and flexibility.

Therefore, while there are certainly concerns and challenges associated with online education, it would be inaccurate to conclude that most teachers hold negative attitudes towards it, as evidenced by the variety of perspectives and strategies mentioned in the findings.

H2 Students and tertiary teachers exhibit diverse attitudes towards distance learning, influenced by factors such as prior experience and technological proficiency.

This statement turned out to be true in the sense that teachers also use the capabilities of online teaching more boldly. If you look at their abstinence from

distance learning before the epidemic and before the war, you can see a big difference.

Before the onset of the COVID-19 pandemic, a considerable portion of respondents, comprising 33%, expressed profound apprehension ('Very' afraid) regarding the implementation of online education. This sentiment stemmed from the relatively limited prevalence of online learning compared to the already well-established digital landscape in education. Conversely, a smaller percentage, accounting for 12.5%, demonstrated no fear of change whatsoever. Additionally, 33% of respondents indicated mild apprehension ('A little'), while 21% expressed minimal concern ('Not really').

However, during pre-war, a significant shift in responses occurred, marking a reversal from the previous data trends. Interestingly, 33.3% of respondents were entirely devoid of apprehension ('Not at all') regarding re-engagement with online tools, signifying a stark departure from their prior fears. Conversely, 12.5% remained steadfast in their trepidation ('Very' option), suggesting a persistent resistance to change. Furthermore, 29% indicated slight unease ('A little'), while 25% expressed marginal concern ('Not really'), painting a nuanced picture of attitudes towards the resumption of online learning modalities.

H3 There are significant differences in attitudes towards distance learning based on variables, such as age.

If we look at the age of the teachers, we can see that there are three between the ages of 25-35, twelve between the ages of 35-45 and nine over the age of 45. Looking at their individual answers and ages, this statement proved to be true in this case. Although the majority of them claimed to be proficient in the online space, and many were open to the topic and mastered this teaching method, the older age group (that is, the larger percentage) preferred the traditional teaching method or mixed education, but by no means would they choose full distance education.

#### **CONCLUSIONS AND PEDAGOGICAL IMPLICATIONS**

With the help of existing reports, surveys, theoretical insights on online learning (both within Ukraine and globally) and a questionnaire, an individual work was created involving the students and teachers of Ferenc Rákóczi II. Transcarpathian Hungarian College of Higher Education and Uzhhorod National University. This research seeked to offer recommendations for the implementation of specific online learning strategies, tailored to the realities of wartime and peacetime contexts in Ukraine.

The findings reveal a dichotomy of opinions regarding the merits and demerits of distance learning. While many participants expressed appreciation for the flexibility and accessibility afforded by online education, concerns were raised regarding its impact on personal relationships, communication skills, and mental well-being. The integration of technological tools into everyday education was noted, with some foreseeing a shift towards a more predominant role for distance learning in the future.

Participants highlighted the challenges of remote assessment and expressed varied views on its efficacy, reflecting the diverse experiences and perceptions surrounding digital evaluation methods. Furthermore, the majority of respondents voiced reservations about the potential negative effects of distance education on mental health, emphasizing the need for proactive measures to support the well-being of students and teachers alike.

All things considered, based on the results and answers found, it can be seen that while the majority of students are ready to move to the online space, the teachers are still waiting for the end of this new development in a reserved position. It is not that they have a negative attitude, because the results clearly show that most of them have successfully mastered the use of the Internet in teaching/learning and many are even excitedly waiting for innovations that can make their everyday life easier and believe that it can make lessons more interesting, but that they are not a 100 percent ready for traditional education to be completely replaced by the online space.

The psychological state, as well as the physical ability to continue studying, is a significant obstacle. Anything can happen, it is also possible that slowly, online learning/teaching will also become burdensome, as many Ukrainian students and teachers are currently involved in volunteer work or represent the ranks of the Territorial Defense Forces or other units of the Armed Forces of Ukraine, so they cannot devote as much time to learning/teaching or concentrate and to prepare to the maximum for every lesson, as before, for the sake of the war. It doesn't matter which part of Ukraine we are talking about, the families of many students and teachers are involved in this conflict (especially our fathers and grandfathers), which has a great impact on all members of the family.

In summary:

- Despite all the disadvantages listed, students are ready to switch to full digital education due to flexibility and convenience.
- The majority of teachers see and recognize the positive aspects of online education, and acknowledge its ease, mobility, and advantages.
- The majority of teachers are not yet ready to change from traditional teaching due to the fear of losing human relations, socialization and reliability.
- The hypotheses were chosen based on popular opinions so that they could be proven true or disproved at the end of the research. Two out of three hypotheses successfully turned out to be true: there are significant differences in attitudes towards distance learning based on variables, such as age and students and tertiary teachers exhibit diverse attitudes towards distance learning, influenced by factors such as prior experience and technological proficiency.
- The statement "Most teachers' attitudes towards online education are negative" is not true in this case.

Lastly, at the end of the survey, our teachers were given the opportunity to share their own comments and further personal opinions, and as a result some wise thoughts were received that make a good ending:

Actually, it is not important in what form we learn, but how motivated we are.

The effectiveness and efficiency of online education is determined only by the student's attitude towards learning! Perseverance to you all and good luck!

Correspondence students can request consultations throughout the academic year, even if they are abroad. They are just as important to us as our full-time students.

For many, online learning is a good option, you just need to be able to learn consciously in this situation. We will overcome all obstacles!

#### REFERENCES

- Allen, I. E., & Seaman, J. (2016). Online report card: Tracking online education in the United States. Babson Survey Research Group. Babson College, 231 Forest Street, Babson Park, MA 02457.
- Daniels, C., & Feather, S. R. (2002). Student perceptions of online learning: A comparison of two different populations. *In Proceedings of the Conference on Information Systems Applied Research, USA.*
- Dobbs, R., del Carmen, A., & Waid-Lindberg, C. (2017). Students' perceptions of online courses: The effect of online course experience. *The Quarterly Review of Distance Education*, 18(1), 98–109 Retrieved from <u>https://eric.ed.gov/?id=EJ864039</u>.
- Donelan, H., & Kear, K. Online group projects in higher education: persistent challenges and implications for practice. J. Comput. High. Educ. (2023). https://doi.org/10.1007/s12528-023-09360-7
- 5. Fullan, M. (2016). The Principal: Three Keys to Maximizing Impact.
- Gao, X., & Shi, L. (2023). Interactions in Online Versus Face-to-face Classes: Students' and Teachers' Perceptions. *International Journal of Chinese Language Teaching*, 4(3), 76-94.
- Hannay, M., & Newvine, T. (2006). Perceptions of distance learning: A comparison of online and traditional learning. *MERLOT Journal of Online Learning and Teaching*, 2(1), 1–11 Retrieved from <u>http://jolt.merlot.org/documents/MS05011.pdf</u>.
- Hargis, J. (2020). What is effective online teaching and learning in higher education? *Academia Letters*, Article 13. <u>https://doi.org/10.20935/AL13</u>
- Hargreaves, A., & Fullan, M. (2012). Professional Capital: Transforming Teaching in Every School.
- Hattie, J. (2009). Visible Learning: A Synthesis of Over 800 Meta-Analyses Relating to Achievement.
- Hopker, E., Atherfold, R., Bartlett, T., Ibrahim, M., Lynch, C., de Carvalho, C. P., ... & Sureshbabu, L. (2021). Exploring the use of technology and teacher confidence to develop and support teaching and learning with variation for fluency in 16-19-year-old GCSE maths re-sit learners, within different learning environments. *Centres for Excellence in Maths.*

- Horspool, A., & Lange, C. (2012). Applying the scholarship of teaching and learning: student perceptions, behaviours and success online and face-to-face. *Assessment & Evaluation in Higher Education*, 37, 73-88. doi: 10.1080/02602938.2010.496532
- Kostyuk, O. (2023.02.27.) Consequences of distance learning. Source: Osvita.ua [online blog]. Retrieved from: <u>https://osvita.ua/blogs/88564/#</u>
- 14. Kumari, G. (2022, April 27). What is the Difference Between Online Education and Traditional Education. [Online] Available: <u>https://www.differencebetween.com/what-is-the-difference-between-online-education/</u> [2023, February 25]
- Myronov, Yu. B., & Myronova, M. I. Advantages and disadvantages of distance learning. YuB Mironov/Access mode: <u>https://kerivnyk.info/perevahy-ta-nedolikydystantsijnohonavchannya</u>
- 16. O'Sullivan, M. (2012). School Leadership: Heads on the Block.
- Patzer, R. (2020). Sharing good practice: Strategies to encourage teacher collaboration. Accessed on 12th February 2022. https://blog.irisconnect. com/uk/sharing-andcollaboration-in-schools
- Robinson, V. M., Hohepa, M., & Lloyd, C. (2007). School leadership and student outcomes: Identifying what works and why (Vol. 41, pp. 1-27). Winmalee: Australian Council for Educational Leaders.
- Sari, T., & Nayir, F. (2020). Challenges in distance education during the (Covid-19) pandemic period. Qualitative Research in Education, 9(3), 328-360. <u>https://doi.org/10.17583/QRE.2020.5872</u>
- Seok, S., DaCosta, B., Kinsell, C., & Tung, C. K. (2010). Comparison of instructors' and students' perceptions of the effectiveness of online courses. *Quarterly Review of Distance Education*, 11(1), 25. Retrieved from <a href="http://online.nuc.edu/ctl\_en/wp-content/uploads/2015/08/Online-education-effectiviness.pdf">http://online.nuc.edu/ctl\_en/wp-content/uploads/2015/08/Online-education-effectiviness.pdf</a>
- 21. Sydorenko T., Sydorenko A. (2022). Distance learning: the view of students and teachers. Library science. Record Studies. Informology. 1, 118–125 [in Ukrainian].
- 22. Trajanovic M., Domazet D., Misic-Ilic B. (2007). Distance learning and foreign language teaching. *Balkan Conference in Informatics (BCI 2007)*, Bulgaria. pp.441-452.
- 23. Weller, M. (2020). 25 years of ed tech. University of Athabasca Press.

- 24. Wong, P. (2005). Online and face-to-face students' perceptions of teacher-learner interactions: A preliminary examination. *Distance Learning*, 2(5), 1.
- 25. Sari, T., & Nayir, F. (2020). Challenges in distance education during the (Covid-19) pandemic period. Qualitative Research in Education, 9(3), 328-360. https://doi.org/10.17583/QRE.2020.5872

#### SUMMARY IN UKRAINIAN

За допомогою наявних звітів, опитувань, теоретичних думок про онлайн-навчання (як в Україні, так і в усьому світі) та анкетування було створено індивідуальну роботу за участю студентів та викладачів Закарпатського угорського коледжу імені Ференца Ракоці II. вищої освіти та УжНУ. Метою цього дослідження є вивчення поглядів як студентів, так і викладачів щодо дистанційної освіти.

Зокрема, дослідження мало на меті зрозуміти погляди викладачів на дистанційне навчання та порівняти схожість і відмінності у ставленні як студентів, так і викладачів до онлайн-освіти Закарпатського угорського коледжу вищої освіти імені Ференца Ракоці II та Ужгородського національного університету. У цьому дослідженні використовувалося опитування ставлення, щоб оцінити думку викладачів щодо онлайн-навчання, зосереджуючись на різних етапах навчання.

Результати розкривають дихотомію думок щодо переваг і недоліків дистанційного навчання. Хоча багато учасників висловили вдячність за гнучкість і доступність онлайн-освіти, були висловлені занепокоєння щодо її впливу на особисті стосунки, навички спілкування та психічне благополуччя. Було відзначено інтеграцію технологічних інструментів у повсякденну освіту, причому деякі передбачають перехід до більш домінуючої ролі дистанційного навчання в майбутньому.

Учасники підкреслили проблеми дистанційного оцінювання та висловили різні погляди на його ефективність, відображаючи різноманітний досвід і уявлення про цифрові методи оцінювання. Крім того, більшість респондентів висловили застереження щодо потенційного негативного впливу дистанційної освіти на психічне здоров'я, наголошуючи на необхідності проактивних заходів для підтримки благополуччя як студентів, так і викладачів.

Враховуючи все, виходячи з результатів і знайдених відповідей, можна побачити, що хоча більшість студентів готові перейти в онлайн-простір, викладачі все ще чекають закінчення цієї нової розробки в зарезервованій позиції. Справа не в тому, що вони мають негативне ставлення, тому що результати чітко показують, що більшість із них успішно освоїли використання Інтернету у викладанні/навчанні, і багато хто навіть із захопленням чекає інновацій, які можуть полегшити їхнє повсякденне життя, і вірять, що це можуть зробити уроки цікавішими, але вони не на 100 відсотків готові до повної заміни традиційної освіти онлайн-простором.

Значною перешкодою є психологічний стан, а також фізична можливість продовжувати навчання. Все може статися, можливо також, що потихеньку онлайн-навчання/викладання також стане обтяжливим, оскільки зараз багато українських студентів та викладачів займаються волонтерською діяльністю або представляють лави Територіальної оборони чи інших підрозділів Збройних Сил України. , тому вони не можуть стільки часу приділяти навчанню/викладанню, ані концентруватися і максимально готуватися до кожного уроку, як раніше, заради війни. Неважливо, про який куточок України йдеться, у цей конфлікт втягнуті сім'ї багатьох студентів і вчителів (особливо наших батьків та дідів), який дуже сильно впливає на всіх членів родини.

Підсумовуючи:

- Незважаючи на всі перелічені недоліки, студенти готові переходити на повну цифрову освіту завдяки гнучкості та зручності.
- Більшість викладачів бачать і визнають позитивні сторони онлайн-освіти, визнають її легкість, мобільність і переваги.
- Більшість вчителів ще не готові до переходу від традиційного викладання через страх втратити людські стосунки, соціалізацію та надійність.
- Гіпотези були вибрані на основі поширених думок, щоб наприкінці дослідження можна було довести їх правдивість або спростувати. Дві з трьох гіпотез успішно виправдалися: існують значні відмінності у ставленні до дистанційного навчання на основі змінних, таких як вік, а також студенти та викладачі вищих навчальних закладів демонструють різне ставлення до дистанційного навчання, що залежить від таких факторів, як попередній досвід і технічний рівень.
- Твердження «Більшість вчителів ставляться до онлайн-освіти негативно» в цьому випадку не відповідає дійсності.

# APPENDIX

#### Survey questionnaire on students' attitudes to online learning

Dear Respondent,

I am Anna Cékusz, a full-time student of Hungarian Philology at the Uzhhorod National University, and also, a correspondence student of the English department of the Ferenc Rákóczi II Transcarpathian Hungarian College of Higher Education. As a study requirement, I have to write an English year paper in my fourth and final year, in which I investigate the attitude of teachers to online learning. My research is conducted under the supervision of Ilona Huszti, English language teacher.

The data is collected anonymously, and you do not have to provide any data from which you can be identified. The answers and data received are aggregated and used for research purposes only.

Thank you in advance for your participation.

#### Gender

Female Male

#### Age

21-25 years old25-35 years old35-45 years oldOver 45 years old

## At which educational institution do you teach at?

- Ferenc Rakoczi II Transcarpathian Hungarian College of Higher Education
- Uzhhorod National University

## Subject(s) taught

How confident do you feel in your ability to teach effectively using distance learning platforms?

• Very

- It is okay
- A little bit
- Not at all

When you first heard about the introduction of online classes due to COVID, how afraid were you of its difficulties?

- Very
- Not really
- A bit
- Not at all

When you first heard about the introduction of online classes due to the war situation, how afraid were you of its difficulties?

- Very
- Not really
- A little bit
- Not at all

In your opinion, what are the main advantages of distance education compared to traditional classroom education?

- Flexibility, comfort
- Access to various online resources
- Increased student engagement through multimedia
- Personalized learning opportunities
- Better work-life balance for teachers
- Other: \_\_\_\_\_

What do you think are the main disadvantages of distance education? (Please check all that apply)

- Nothing
- Fatigue
- Eyestrain, back pain
- Limited teacher-student interaction
- Technical problems and lack of access to devices/internet
- Difficulties in maintaining student motivation and commitment
- Limited opportunities for hands-on activities and group projects
- Increased workload for teachers

• Other: \_\_\_\_\_

Which online platforms or tools do you consider the most effective for promoting distance learning? (Please list and comment on their usefulness if there is any)

Have you received adequate training and support to use these platforms/tools?

- Yes
- Not really
- No

What strategies have you found most successful in keeping students engaged in online classes?

What additional support do you think students need in the distance learning environment? (e.g. technical support, emotional support, additional learning resources)

What do you think is necessary for more cooperation and sharing of useful practices (among teachers) in the framework of distance education?

- Yes
- I don't care
- No
- Do you think distance education can replace traditional education?
- Definitely
- There is a chance
- Yes
- Not possible

What long-term effect do you think distance learning will have in the field of education?

To what extent do you agree with the following statement: "Students learn less during distance education"

- Fully
- Partly yes

- Partly not
- Not at all

To what extent do you agree with the following statement: "There is more academic dishonesty (cheating, plagiarism) in online courses."

- Fully
- Partly yes
- Partly not
- Not at all

To what extent do you agree with the following statement: "During distance education there is a greater chance of developing depression, depersonalization and anxiety (both among teachers and students)"

- Fully
- Partly yes
- Partly not
- Not at all

To what extent do you agree with the following statement: "It is easy to assess students' knowledge using digital tools"

- Fully
- Partly yes
- Partly not
- Not at all

To what extent do you agree with the following statement: "It is easy to assess students' knowledge using digital tools"

- Fully
- Partly yes
- Partly not
- Not at all

Do you use a computer/tablet/smartphone to update your subject knowledge or improve your knowledge of a subject area (for personal or professional purposes)?

- Yes
- Often
- Rarely

• Not at all

Maintaining a work-life balance is key. How did you manage your time and how did you avoid 'burnout' during online teaching?

What is your general attitude towards distance education?

- Very positive
- Positive
- Neutral
- Negative
- Very negative

Attendance teaching and online teaching are also not allowed in the case of air raid warnings. What would you recommend for such situations? Can learning be solved in the long term with such problematic situations?

Would you switch to full online education?

- Yes
- I support mixed education
- No

If you would like to share some personal experience with online education, you can do so here:

Thank you for your answers!

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