Experiences of online education during lockdown at Debrecen Reformed Theological University

Anikó Joó PhD, Viktória Molnár-Tamus PhD
Debrecen Reformed Theological University

Introduction

In March 2020, Hungarian higher education, similarly to other higher education systems around the world, was forced to switch to online education. Although its literature has been well-established for many decades (Amutha 2009, Carrillo – Flores 2020, Kiryakova 2009) and several educational systems around the world have gained significant experience in its practical application (Wake et al. 2007, Goodfellow 2011, Sevillano-Garcia – Vázquez-Cano 2015, Akbar 2016), online education has posed challenges to both lecturers and students in Hungary. Its infrastructural conditions were more or less given at Debrecen Reformed Theological University (hereinafter DRTU), and the institution was able to carry out the essential improvements in a short time. The biggest challenge in the education of primary school teachers and theologians as well as in-service trainings of teachers was the organization of trainings and internships, since the training places – primary and secondary schools – were also closed and switched to digital curriculum. A further challenge was to keep up the motivation of our students and lecturers to preserve the quality and efficiency of education and the assessment on online platforms.
We started the academic year 2020/2021 in attendance education, but in November 2020, due to new government measures, we returned to online education, and at DRTU we maintained it until the end of the academic year. At the beginning of the exam period we felt it would be necessary to collect data on the physical and mental condition of our students along with their experiences on online education – partly because digital education, despite its well-established literature, posed a challenge in practice to teachers and students alike. The other aims were to see the state in which we 'get back' our students to classroom education, as well as to incorporate the experiences into our day-to-day teaching practice and into the institution's development plan.
Hopefully, we won't be forced to make another switch. At the same time, we are convinced that the wider use of teaching and learning opportunities inherent in digitalisation, regardless of the situation of the pandemic, will determine the directions of development in higher education, especially in teacher training. We need to prepare our students for the education of the alpha generation (McCrindle, 2010).
There is still little information available on the age group born after 2010, but institutional education should expect their representatives to be able to navigate in the online world easily and quickly. In order to raise and maintain their learning motivation, it is necessary to explore as widely as possible, apply and improve a number of customised learning opportunities offered by digitisation that require cooperation and allow for individual development at an individual pace.

Methodology

The goal of the research was to get to know the state of mind of DRTU students after lockdown, their experiences related to online education, their digital knowledge and to get a comprehensive picture of the platforms and learning applications used by the lecturers. The total population consists of 502 people, including full-time and part-time students in

theological and teacher education, as well as students in our in-service programs (bibliotherapy, family and child protection, drama pedagogy, developmental pedagogy, public education management, sociotherapy).
The measurement tool was a self-developed, self-completed, online questionnaire, which we distributed to students through Neptun electronic study system with the help of the Registrars Department. The structure of the questionnaire is characterised by the inclusion of multiple-choice and open-ended questions on data collection on physical and mental status, forms of communication, digital competence, learning motivation and platform, tools to support learning, and the advantages and disadvantages of online education, along with a four-, five-, and seven-degree Likert scales. The questionnaire was completed by 140 students, representing a completion rate of 28%.
In connection with the research results, we formulated the following hypotheses. (1) After lockdown, the mental state of the students is less favourable than their physical condition. (2) The main way of communication with the lecturers was e-mailing. (3) Students' digital knowledge has not developed significantly. (4) Students regarded the flexible schedule, time and cost savings and easier-to-meet requirements as the most significant benefits.

Results

The gender distribution of the 140 respondents - 102 women (73%) and 38 men (27%) - represents the distribution of male and female students at DRTU. The feminization of the teaching profession is a well-known fact, based on which we could expect an even higher proportion of women, but the proportion is improved by a larger number of male students participating in theological degree programs. The distribution of the sample by training and year is shown in Figures 1 and 2.

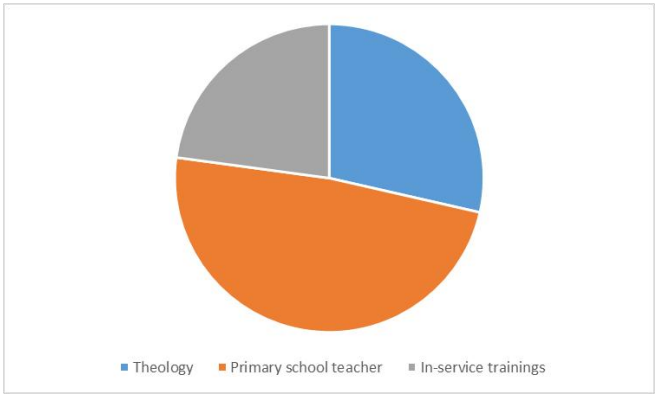

Figure 1. The distribution of respondents by training (n=140)

Primary school teacher candidates are over-, students receiving theological training and specialized in-service training are underrepresented in the sample (Figure 1). In terms of years, the highest proportion of year 2 students could be explained by the fact that they are already accustomed to university life, acclimatised enough and, as they are not so close to the graduation as their senior peers, they are motivated enough to take part in various research. In addition, the participation rate of 1st- and 2nd-year students has been increased by students who participate in two-year courses in specialized in-service trainings. 5th- and 6th-year training is in the Institution of Theology. In year 5 the response rate was surprisingly low, while the 6th-year students, who had spent their years in exile, participated in the survey in almost the same proportion as the 1st and 3rd graders (Figure 2).

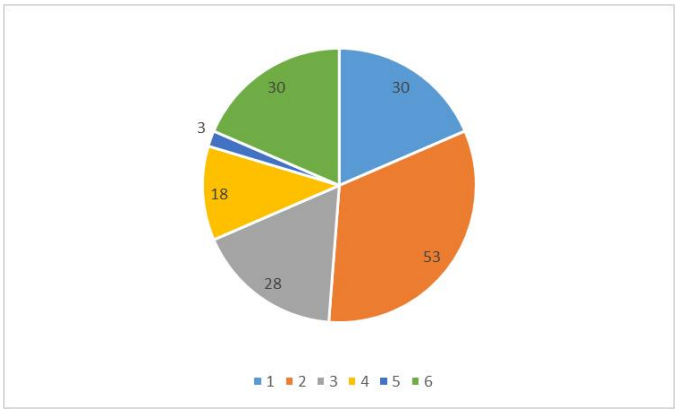

Figure 2. The distribution of respondents by year (n=140)

The state of mind of the students after the school year, which was mostly implemented with online education, was characterized by the fact that slightly more than a third of them were very good, one third a good, and only 3% were in a very bad state of mind (Figure 3). Data were collected on a 5-point Likert scale, where 1=very bad, 5=very good. These results are more favorable than expected. During the period of online education, we lived our daily lives under the weight of national restrictions, in which there was a curfew, limited shopping periods, cultural institutions, nightclubs and gyms were closed. The work of several young students has been terminated or suspended, yet the data show that these measures have put less strain on the state of mind of our students than we had expected. The result is also surprising because, according to them, the teachers participating in the in-service trainings experienced digital education as a double burden, as they were intermediaries as educators and ‘sufferers’ as students.

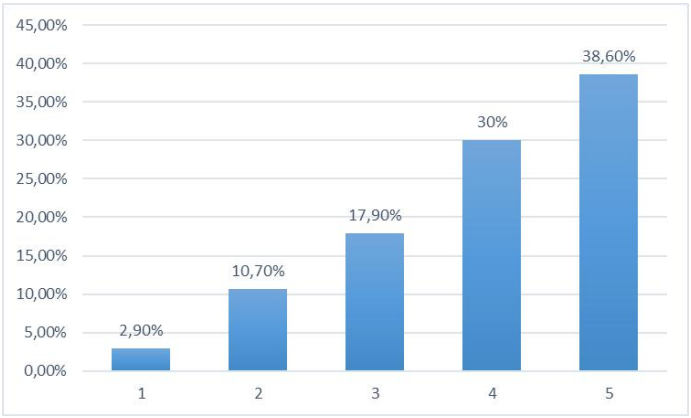

Figure 3. Mental state after lockdown (n=140)

The physical condition (Figure 4) shows a more unfavorable picture. The tool for gathering information in this case was also a 5-point Likert scale, where 1=very bad, 5=very good. The latter characterizes 21% of the sample. Nearly half of the respondents consider their physical condition to be good, while 30% had a moderate or worse physical condition after online education. However, from the results the impact of home-based learning and the associated reduced mobility is not clear, as no similar assessment of students' physical condition was made before the period of online education.

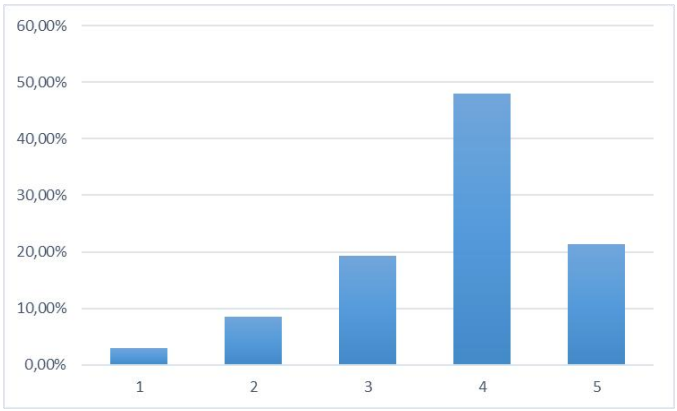

Figure 4. Physical condition after lockdown (n=140)

When asked what students did to maintain their physical condition (Figure 5), a significant proportion reported moving at home and/or outdoors. In particular, the latter probably had a positive effect not only on the physical state but also on the state of mind. More than a third (33.8%) of the students needed psychological help during or after online education. The phenomenon may be due to the lack of direct contact with lecturers and fellow students, as well as the lack of Morning Prayers, Monday academic services, institutional events, grade and group programs, and, in the case of some students, the lack of learning motivation.

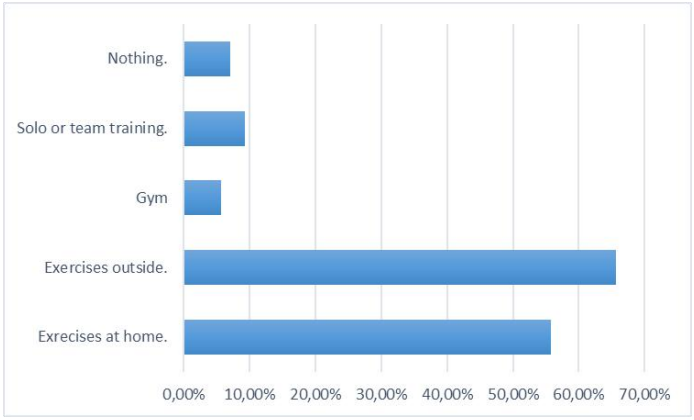

Figure 5. What the respondent did to stay in good physical state (n=140)

The main means of communicating with the instructors – the well-proven – e-mailing remained, and the Neptun Meet Street application, which was ordered by the university as a new service, was also ranked high. Students used these opportunities primarily for individual consultation, asking for help, and submitting homework. Real-time lectures and seminars typically took place on Google Meet, Zoom, Webex, and Teams Internet platforms. The university management did not make any of them exclusive to the faculty. However, Figure 6 clearly shows that during this period, students also used forms of communication — see Messenger, Skype, and telephone — to communicate with instructors that were previously used primarily in their private relationships. Online education, especially assessment, has required greater trust from both educators and students, and this has been shaped by the use of more popular communication channels linked to social networking sites. On the other hand, these modes of communication have been present in the everyday life of the student age group before, they are used with sufficient experience, confidently and probably with pleasure by them.

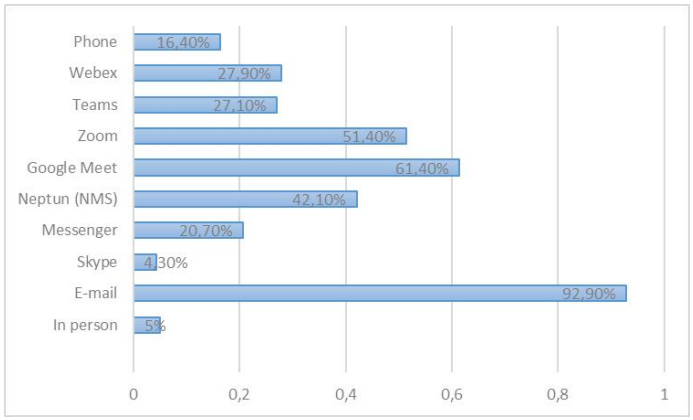

Figure 6. Keeping contact with the teachers (n=140)

This phenomenon can be seen in Figure 7, which shows the communication with groupmates. The main channel was Messenger application. This may be explained by the fact that it is free, fast, suitable for voice and video calls, rarely there is a service outage or other technical problem, and can be used by those who do not want to connect to Facebook, which is more typical for educators. Keeping contact in person is not negligible either, with 20% of respondents staying connected in this way.

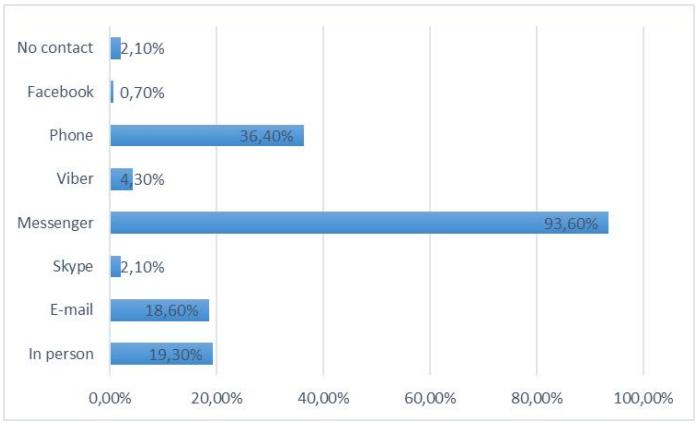

Figure 7. Keeping contact with the groupmates (n=140)

Based on the generation characteristics of the student age group (18-25 year olds in full-time and more heterogeneous in evening and correspondence), we expected that digital competence had not developed significantly during the online education period. Our full-time students are representatives of Generations Y and Z, who are born into, feel comfortable in and easily navigate the digital world (Komár 2017). In contrast, the results show that on the 5-degree Likert scale, where 1=minimal digital knowledge, 5=excellent digital knowledge, nearly 86% of respondents rated their knowledge as good or excellent compared to 68% before online education (Figure 8). The result is probably not due to the use of online channels of education, but, as we can attest from our personal experience, to the fact that students were given several individual (or pairwise or group) tasks, the solution of which improved their digital competence. Such was the gathering of information on the Internet, making a power point or presenting a presentation. Furthermore, such were the testing of learning applications such as Kahoot, Quizizz, Quizlet, LearningApps, which had been used in the training school for many years and had previously been used during the training due to the forced situation. In addition, the collaboration generated by the tasks that can be performed in pairs or in groups probably contributed to the development.

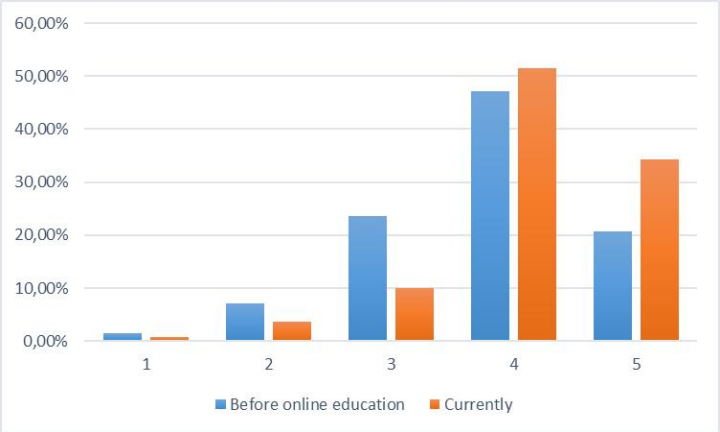

Figure 8. Digital competence (n=140)

The benefits of online education were most seen by students in terms of appreciation of self-directed learning, flexible scheduling, time and cost savings, easier fulfillment of requirements, and better learning outcomes, while most cited the lack of personal connections as a disadvantage (Figure 9). The enjoyment of the lessons, the varied organization of learning and motivation - presumably related to them - the possibility of deepening the knowledge, as well as the objectivity of the evaluation were given lower values. The results point out the initial weaknesses of online education on the one hand, and the directions for improvement on the other.

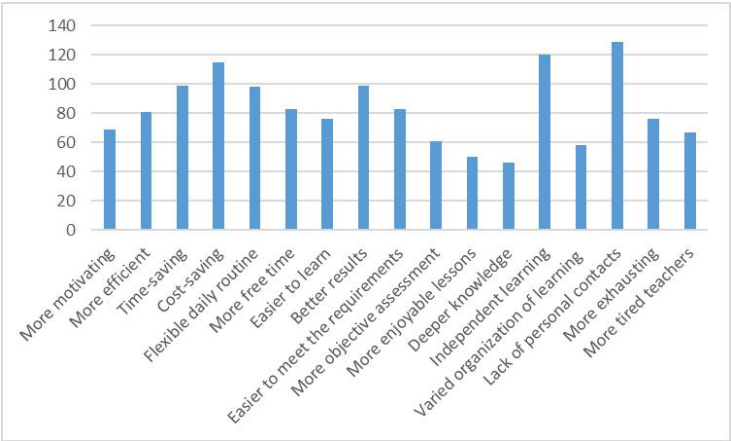

Figure 9. Benefits and drawback of online education (n=140)

The time and cost savings are thought-provoking, which can not only reduce student spending but also reduce the operating costs of institutions. The raison d'être and benefits of classroom education are unquestionable, but 'blended' or hybrid education - while retaining the positive experience of online education under the lockdown - would have just such benefits. In higher education, lectures can be used primarily on digital platforms, while seminars and practices that require a greater presence can still be held in the classroom or in practice places. A further interpretation of hybrid education is that seminars held in the presence of the teacher and students can be made available online to students who are at home due to illness, for example. The infrastructural conditions of the former are given at DRTU, while the latter requires further development and raises the issue of privacy rights and data management.

Summary

The results partially support our hypotheses. After the period of online education, the physical condition of our students has proved to be less unfavorable, not their mental state. Several forms of contact with instructors were mentioned, but at the same time, the result confirmed our assumption that e-mail was the most preferred. Contrary to our expectations, the digital competencies of the students interviewed (representing the Y and Z generations) – according to their confession – have developed significantly, which we consider to be an extremely favorable result. The hypothesis that students consider the benefits of online education to be the most flexible scheduling of their time, time and cost savings, and better learning outcomes has been confirmed.

The presented results are descriptive statistics, the low number of items in the sample does not allow further analysis and exploration of correlations. However, the continuation and further development of the research is justified. We are convinced that, regardless of the viral situation, online education in tertiary education, as well as in primary and secondary, must be taken into account, we must work on the wider application of its potential, on the continuous testing and further development of its effectiveness. Nothing supports this more than the outstanding performance of education systems with the most advanced digital education in the world, such as Singapore, China, the Republic of Korea and Estonia among post-socialist countries, in recent international student performance measurement (OECD 2019). Primary school teacher and pastoral training is increasingly involved in this, as the development of digital competences for the rising generation, the development of an ethical, constructive, and responsible digital culture for sustainable development will inevitably be in the hand of our teachers and pastors.

The research was funded by the research and finance grant of the Debrecen Reformed Theological University.

Literature

Akbar, M. 2016. Digital technology shaping teaching practices in higher education. Frontiers in ICT, 3, 1. https://doi.org/10.3389/fict.2016.00001 (letöltve: 2021.11.11.)

Amutha, D. 2020. The Role and Impact of ICT in Improving the Quality of Education. http://dx.doi.org/10.2139/ssrn.3585228 (letöltve: 2021.09.25.)

Carrillo, C.–Flores, M. A. 2020. COVID-19 and teacher education: A literature review of online teaching and learning practices. *European Journal of Teacher Education*, 43(4): 466-487.

Goodfellow, R. 2011. Literacy, literacies and the digital in higher education. *Teaching in Higher Education*, 16(1): 131-144.

Komár, Z. 2017. Generációelméletek. Új köznevelés, 8-9. https://folyoiratok.ofi.hu/uj-kozneveles/generacioelmeletek (letöltve: 2021.11.29.)

McCrindle, M.– Wolfinger, E. 2010. Az XYZ ábécéje. A nemzedékek meghatározása. Korunk 21(11): 13-18.

OECD 2019. PISA 2018 Results (Volume I): What students know and can do. PISA, OECD Publishing, Paris.

Sevillano-Garcia, M. L.–Vázquez-Cano, E. 2015. The impact of digital mobile devices in higher education. Journal of Educational Technology & Society, 18(1): 106-118.

Wake, J. D., Dysthe, O.–Mjelstad, S. 2007. New and changing teacher roles in higher education in a digital age. Journal of Educational Technology & Society, 10(1): 40-51.