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## ACADEMIC TEACHING IN THE ERA OF COVID-19. SELECTED PROBLEMS OF ACADEMIC TEACHERS' WORK IN POLAND AGAINST THE BACKGROUND OF THE WORLD SITUATION

**ABSTRACT:** The COVID-19 pandemic has significantly affected education in the vast majority of countries around the world. Educational systems were not prepared for this. This also extends to higher education. Certain measures have been taken in attempt to enable teaching in the new reality. The pandemic is global in nature and the changes in education have a similar aspect as well. After 12 March 2020, distance education was also introduced in Poland. Several months of distance learning have yielded some interesting experiences and shown the problems that arise when designing such educational systems. Due to the epidemic situation that is still far from being under control, it should be assumed that distance education will remain with us for longer. The article presents the results of research on distance learning in Poland in the first period of the pandemic in relation to the global situation. It focuses on academic teachers and the challenges they have faced when switching to distance learning.

**KEYWORDS:** COVID-19, online education, higher education, academic teacher.

### Introduction

The COVID-19 pandemic has affected many aspects of our lives almost overnight. It also significantly influenced the organisation of educational system at all levels. Higher education facilities were also affected. The changes were global in nature. Overnight, the educational systems of different countries were confronted with the need for online education. A form of education that was not accepted by everyone suddenly became obligatory. What in many cases was treated as an educational novelty, often serving to promote higher education facilities, has become the everyday life of thousands of colleges around the world. Were we prepared for it? Probably not, just as in many other areas of life, COVID-19 forced us to make changes also in education. Academic teachers must also face these changes.

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In Poland, the date of 12 March 2020 marks the moment of the introduction of changes. Academic teachers faced the challenge of applying technology in teaching. Their experience in this respect has probably varied (from the ongoing practice in e-learning to avoiding the use of technology in teaching). Many teachers did not have sufficient experience and skills in this field.

Studies undertaken by researchers affiliated with the Media Pedagogy and Education Culture Team at the Institute of Pedagogy of the University of Szczecin were to answer, among other things, the question of how academic teachers managed to handle the imposed distance learning systems at the first stage of COVID-19.

Distance learning is one aspect of the new academic reality that seems to be increasingly fluid. On the one hand, it causes a certain discomfort, but on the other, it offers new opportunities. Gibbs believes that the pandemic offers a chance to rethink the role and functioning of a university in our society. Moving away from the liberal model, reaffirming the value of the humanities and paying more attention to shaping relationships, building new educational rather than business goals (Gibbs 2020). Perhaps the pandemic will become a stimulus for significant social change, including in the field of education (McCulloh 2020).

### **Teaching at universities in the early stages of a global pandemic**

The COVID-19 pandemic has severely damaged the global economy, society, and education. The process of education was shut down for a long time because institutions and schools were closed. Up until 5 April 2020, there were 194 countries that closed schools around the world, which means that around 1.598 billion students (about 91.3% of the total number of students in the world) could not go to school. Then, as the restrictions were being eased, schools in some countries began to resume schooling. As of 7 September 2020, the number of countries with school closures decreased to 49; however, 869 million students (approximately 49.6% of the total number of students in the world) were still unable to attend school (UNESCO 2020). It was thanks to the development of technology that online teaching in these difficult times was possible at all. What would have happened if we did not rely on the Internet during the epidemic? Quite possibly schools having not met the requirements of the curriculum would have forced students to attend classes during the summer holiday with the risk that some of them would still not be able to re-open. It was the first time in the history of education that online teaching had been launched on such a wide scale.

Launching long distance learning was a necessary response to the pandemic. Due to the differences in the severity of infections and education systems, there are also big differences in terms of specific measures taken by governments. The OECD carried

out a survey among 59 countries. 150 educational administrators and 993 teachers participated in this survey, which focused on the emergency educational policies during the COVID-19 pandemic. The report shows that 52.1% of school staff thinks that the 'government unites schools and develops alternative education measures' as the right approach, 31.3% of participants hold the opinion that the school closure measures should be independently arranged by the school, 8.1% of participants believe that governments did not take schools into consideration when arranging education measures at all (Reimers & Schleicher 2020b).

The education systems around the world are not prepared enough to provide online learning opportunities on a large-scale in most countries. Teachers have not mastered the methods and means of integrating technology into teaching. The opportunities for teachers to develop the ability of ICT teaching are insufficient (Zhaohui 2020). What made teachers anxious the most is that they did not have enough time or any previous experience to prepare themselves for online teaching. China was the first country to assume the long-distance learning policy in response to the epidemic situation. In the beginning, students received information that the winter holidays were going to be extended for around two weeks, until the end of February. While students were enjoying their free time, university authorities started to seriously consider implementing online classes. Teachers needed time to prepare their teaching plans and materials, to plan interactive activities during the class et cetera. However, they did not get the chance to prepare or to attend any training courses about online and media education. 'In Italy, the disruption started on 21 February 2020, when the first cases were reported in Codogno, a small town in the southern Lombardy region. Initially, the closure was supposed to last until 15 March 2020. On 16 March, the delivery of the entire educational offering of the semester was entirely in distance mode' (Agasisti & Soncin 2020).

There were only a few teachers who had the actual experience of running an online class. Some teachers did not adapt well to online teaching in the beginning and they did not change their plans and ideas in time to accommodate better interaction with students. They just used their usual teaching resources which were not so suitable to use in long-distance learning and as a result they could not attract students' attention. The reason why teachers use less ICT in classes is that they don't know how to use it. Only 17.9% of teachers in Japan stated that they integrate ICT into the classroom. The average of the OECD countries is 52.7%, while England 41.3%, France 36.1% and Italy 46.6% are lower than the average level. 64.2% of Italian students expressed their worry that there is too much homework (Tejedor et al. 2020). It can be inferred that teachers who were lost as to what to do and how to conduct their classes just took the easy way out and started using homework to cover up their lack of preparation. Many professors had a feeling that they were just like novice teachers when running online classes. In

China, there were about 5000 teachers from 187 universities who responded to a survey about online education with only 20% of them having had the experiences of conducting an online class before (Gulati 2020). Teachers in Italy faced similar problems as it was the first country in Europe that was hit by the virus. The Polytechnic University of Milan, which is located in the region that was most affected, reported in its findings that the IT department offered tremendous help to the teaching staff. They prepared live webinars on how to use online teaching platforms and after that distributed them to all professors. Not only that, but technical support was also constantly available by e-mail or by the use of virtual meeting with technicians (Agasisti & Soncin 2020b).

There are varying differences regarding network quality between different countries. Taking China as an example, the hardware and software, especially in western parts cannot adapt to demands of online teaching. Even though some universities and institutions had already enjoyed 5G Internet access with transfer speeds ten times faster than 4G, students in less urbanised areas had to desperately look for better reception to attend their online classes. Unstable connection made the classes difficult to follow and confusing. The sheer number of people staying at home only added to this problem as streaming TV series and using the Internet for other forms of entertainment made the connection painfully slow. Bridging this technological gap certainly needs time and a lot of investment from local governments.

Another thing is that almost every online teaching platform had some kind of issue related to massive, unprecedented traffic and were not stable enough due to the huge number of simultaneous connections. It is apparent that the Internet infrastructure is not sufficient when its bandwidth is tested to its limits. One might think that in developed European countries this situation does not take place; however, OECD data on Internet access and access to computers proves otherwise. According to the latest available data, 85.2% of Italian households has Internet access either by using a dial-up, ADSL or cable broadband but only 72.5% has computer access at home. It is understood as having at least one personal computer in working order. In Poland this situation is as follows: 86.7% of households have Internet access and 81.8% are in possession of a personal computer (Reimers & Schleicher 2020a).

By using this data, it is possible to infer that the percentage of students who cannot attend online classes or can attend only partially is higher than expected. Despite being considered as technologically advanced and developed countries, this happens to a larger and lesser extent all over the Europe. On top of that, online education cannot work without ICT resources being available and in working condition at schools, and without teachers with knowledge on how to conduct online classes. 'Some preliminary and partial evidence suggests that remote learning has been well below what could have been expected from developed countries, not just because of households' deficiencies,

but also because of school shortages of ICT devices, digital platforms and skilled teachers' (Murat & Bonacini 2020).

### **Teaching at Polish universities after 12 March 2020 in light of the research**

The survey prepared by the Szczecin team aimed to diagnose and problematise the situation in which students and academic teachers found themselves after the introduction of restrictions on direct contact. The survey method was used. A special questionnaire (in two versions: for students and academic teachers) was disseminated via the Internet. There was a problem with data collection right away. In the group of students, the number of completed questionnaires was relatively fast, while problems arose in the group of academic teachers. Despite the search for various ways (both institutional and non-institutional), there was a problem with collecting the appropriate amount of data. We managed to collect 118 survey responses from academic teachers from various Polish universities. The research is still being continued and carried over to the international level.

The collected data allow (so far, to a limited extent) to draw conclusions about the preparation and use of new technologies in education by academic teachers. Almost half of the research group consisted of women (54%) and the other half of men (46%). The vast majority were former university employees (63.6%). Almost ninety percent of the group were representatives of state universities. When it comes to science, the largest group were representatives of social sciences (64.5%). Perhaps because this group was most professionally interested in the problem, and in this environment, the research was the most recognised and met with a response. Only 11.9% of the responses came from representatives of engineering and technical sciences and 5.9% from representatives of the humanities. Single questionnaires were sent by academics from medical and health sciences, agriculture, science and natural sciences, agriculture, theology and arts. The structure of the group depending on degrees and academic titles was also interesting. The dominant group were doctors (61.9%). Masters (18.6%) and habilitated doctors (16.1%) were more or less at the same level. Respondents with the title of professor constituted a small percentage (3.4%).

The group of questions in the survey focused on the relationship of academic teachers with technology that they had to use in online education after 12 March 2020. The situation in Poland was very different in terms of the choice and method of using tools, the policies of Polish universities were different in this respect. Some universities allowed (at least in the initial period) the possibility of sending materials, recording lectures, and e-mail consultations. They made it possible to use communication tools in a more

static way. In others, from the very beginning, active contact with the student was focused on using communicators such as Skype, Microsoft Teams, Google Meet or Zoom.

Universities encouraged cooperation by using communication platforms in various ways. Some predefined which platform should be used and often made it possible to fully use their capabilities thanks to special agreements with the owner. Others were free to choose an online learning platform. The academics were in the worst situation, they had to use various platforms and additionally cover the costs of using them. The environment of digital communication platforms was not known and safe for everyone.

The research of the team from Szczecin showed that only every tenth academic teacher knew the platform that they had to use in education after 12 March 2020 (11.9%). 28% of teachers knew them on average. But most (60.1%) did not know digital tools at all. Such a large group of people unfamiliar with tools at the same time provokes the question of how they coped with the tools and where they looked for help.

It turns out that the academics appreciated the help from the university. 44.7% assessed it as high or very high. 34% of respondents were of the opposite opinion. Every fifth did not have an opinion on this issue. High ratings of support from universities were quite surprising in the context of responses to other questions that expressed disapproval of the activities of university authorities, deans of faculties or directors of institutes (e.g., in the context of introducing various forms of control over the conduct of online classes).

A certain explanation of this phenomenon are the answers to the next question, which deals in more detail with the issue of supporting academic teachers in the efficient use of online learning tools. Only every fifth teacher (20.3%) assessed that they received the greatest support from the university authorities. Definitely the largest group (34.7%) found that they received the most useful help from their colleagues from universities. Perhaps the high scores for university support from the previous question resulted from the identification of these two sources: university authorities and associates. Every tenth teacher was provided with such professional support by relatives (10.2%). There are also platform developers (5.1%) and students (3.4%). Rather, one could not count on the support from the Ministry of Science and Higher Education (0.8%). The teachers did not see any support from local authorities.

You can see that academics were looking for various ways of supporting the new reality. Rather, they leaned towards those people with whom they had some kind of relationship and whom they trusted (colleagues, relatives). Under the pressure of the pandemic, they had to significantly expand their workshop, especially when it comes to new technologies in education. This applied not only to the educational process, but also to the life of the university in general. All kinds of advice, meetings, scientific conferences, as well as the defense of theses were held online. Especially in the first stage

of the transition to distance learning, there was a lack of clearly defined rules. In the month of May, each university struggled to have some stable (although it still seemed temporary) procedures for educational activities resulting from statutory obligations.

The summer holidays seemed to have interrupted this process of adapting to the new educational reality at the right moment. The three-and-a-half-month-long training ground brought a number of experiences (both positive and negative). All indications are that it is not possible to return to the pre-pandemic situation yet. Time to develop a stable system with eLearning platforms at the heart of it. Nor is it possible to completely switch to an online system only. There are a number of activities (exercises, laboratories) that are very difficult to do in this way. Probably the 'new educational normality' will be flexible (the so-called flexi formula) and will be a mixture of elements that we know well before the pandemic and those that we are forced to introduce in connection with the existing epidemic situation.

In this context, a certain educational optimism is brought by academic teachers to answer the question about the use of online education in the future. More than half of the surveyed academic teachers (61.1%) are able to permanently accept various forms of online education in the system that will develop after the pandemic. Only 9.3% of the respondents have the opposite opinion. Still almost one third (29.6%) do not have an opinion on this subject. It can be concluded from this that although academics were generally not well prepared to use communication platforms in education, many of them were convinced by their experiences at the beginning of the pandemic. The holiday period gave time for the system to better adapt to the needs of academic teaching. It is not only about the teaching process itself, but also its management and administration. Various forms of support should also be introduced for both academic teachers and students, which will calm the whole situation and free it from chaotic elements.

### **The educational 'new normality' of universities. Challenges for academic teachers**

Gibbs sees the current crisis triggered by the COVID-19 pandemic as an opportunity to rethink the place and role of the university in modern society. This applies to both educational ideals, knowledge transfer tools as well as building the academic community (2020). On the way to the 'new educational normality', it is worth paying attention to the need to reflect on a few key elements for the entire system. Ravitch stresses the need to define 'a well-educated person'. According to her, it is "a well-endowed mind shaped by reading and thinking about history, science, literature, art, and politics" (Ravitch 2011, p. 347). The second important element in designing instruction manuals in the field of education is to base them on appropriate theories of human learning

and development (Brown 1994). It all adds up to using the right tools. Today we face a challenge (which we cannot escape in times of a pandemic) of using new technologies in higher education.

The teacher becomes the critical point in shaping the new system. It is not just about equipping them with the appropriate tooling competences. It is also about what Jerome Bruner calls 'folk pedagogy'. According to him, common sense beliefs, whether expressed by non-specialists or 'experts', absolutely require some 'deconstruction'. No matter if they are right or wrong, their influence on teaching can be very significant (Bruner 1996).

Research has shown that besides teachers' attitudes, technology (both software and hardware) becomes the second critical point. Academic teachers had limited competence in using communication platforms. Only 11.9% of the surveyed academic teachers knew the tools used for distance learning beforehand. At the initial stage, higher education facilities managed the issues on their own, offering support at various levels and proposing different tools.

In many places, the network was also not prepared for the load that increased by the hour. Both students and academic teachers often did not have the equipment that would be efficient in using the offered communication tools. Providing space for distance learning at home (especially in case of a larger number of students) required reorganising households.

Online teaching in the first phase of the pandemic has also shown that we may be facing health-related challenges. Spending so much time sitting in front of the computer may have negative consequences. Both teachers and students have complained about problems with their musculoskeletal system, as well as eye problems.

Everything indicates that the educational 'new normality' will be a kind of hybrid, also known as the 'flexi formula'. We will therefore be dealing with a mixed system, where one or the other element may gain an advantage at different times depending on the dynamics of the spread of the pandemic. What we experienced in the first half of 2020 in education was a kind of testing ground, where many people acted intuitively and tested various solutions. In the initial phase of online education, the use of e-mail was dominant first, and then synchronous forms. It seems that universities will put more emphasis on the preparation of asynchronous forms (online tests, recorded lectures, podcasts, etc.). However, we are still participating in a kind of educational experiment, a reality that is changing dynamically. Therefore, when preparing an effective distance learning system, attention should be paid to at least four aspects.

First, it is flexible management of the entire system. This also applies to activities at the national level. It should concern some guidelines and recommendations as to the organisation of distance learning so that the system is relatively consistent. However, the



authorities of universities and even departments should be left with a lot of autonomy. The possibilities of individual universities are different, as well as their previous experiences and developed solutions.

Second, is the proper preparation of teachers. Providing them with adequate support, first of all, by universities or companies providing tools for distance learning. At the beginning of the pandemic, teachers sought support primarily from their relatives and colleagues. They also assessed well the support from the university (Ali 2020). However, there was a lack of comprehensive solutions in the form of training, equipment or tools (although some universities took care of free access to communication platforms for their employees and students).

Third, there is a need for appropriate technologies. It is about both software and hardware. Universities should ensure access to appropriate tools and sufficiently fast internet. There is a fairly large selection of communication platforms on the market, and there will probably be new proposals dedicated specifically to academic education. The development of the 5G network also allows us to be optimistic about the speed of data transfer in a situation where the Internet will be heavily burdened with online education.

Fourth, are students as recipients of online education. In addition to the aforementioned problems in the field of technology, a number of non-technological questions regarding distance learning arise. Does distance learning violate privacy? Should webcams be required to be enabled? How to control student activity during classes? What types of classes can be conducted online? These are just some of the questions that the practice so far raises. Hence the need to create special regulations or supplement university statutes with elements related to distance learning. Outside of technology, there is a problem of interpersonal relationships. Throughout the centuries, education has been based on a master-apprentice relationship that developed in the same physical space. To what extent will the changes affect the development of the communication skills of students? What should be done to ensure that direct contact in the field of education is not seen as a time-consuming ephemeron in a few years? Mohammed Amin Almaiah et al. list, among the challenges of shaping the distance education system, ones related to culture, support, financing, legal aspects (2020). However, they overlook the inherently human consequences of distance learning resulting from a change in the nature of communication. Meanwhile, this challenge may come to the forefront over time.

## Conclusions

The outbreak of the global COVID-19 pandemic has undoubtedly surprised education systems around the world. It also surprised higher education, where the most educational

e-learning experiments were conducted. However, it turned out that the system and the academic teachers were not prepared for new forms of education. The weeks of distance learning became a valuable training ground that showed the weaknesses of the system and allowed us to design more efficient methods today.

The initial difficulties probably also stemmed from the fact that no one really knew how the epidemic would develop. Today we know that distance learning will stay with us for longer (and maybe even in the form of a mixed system forever). We are wiser about the experiences of different countries. This accumulated experience and the constant development of technology can offer a chance for a new quality of education and at the same time the rethinking of the mission of the university and higher education in general.

It is now fairly certain that distance learning will become a permanent feature of educational systems around the world. It can also be attractive for economic reasons (an extensive structure designed for conducting classes in a traditional form will become unnecessary). The acceptance for remote work is also increasing globally (Parker et al. 2020). It should be expected that this tendency will also increase among academic teachers. After the initial shock, we are dealing with a relatively balanced situation as well as a search for stable tools that will make distance education the everyday life of educational systems.

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