

UNIVERSITY MANAGEMENT SOLUTIONS DURING THE COVID-19 PANDEMIC: A CASE STUDY OF LITHUANIA

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Abstract. *Purpose* – The article is aimed at analyzing university management decisions during the COVID-19 pandemic thus emphasizing the impact of the decisions made on the effective management of the situation.

Research methodology – To achieve the established goal, research methodology involved the qualitative research strategy applying the semi-structured interview method and scientific literature analysis. The article is of a theoretical and empirical nature. The empirical part presents its individual research on implementing strategies in the field of adapting appropriate areas of the University as an important part of the study implementation process. The study involved 15 experts – 12 men and 4 women. The research results are the basis for developing practical guidelines for higher education institutions.

Findings – Research findings have disclosed that successful management decisions fall into eight categories: management actions, the collaboration between the different levels of authorities and the academic community, the development and maintenance of a technical base, timely and continuous academic support for teaching staff, multipurpose support for students, control over the studying process, security assurance, solutions at the level of study programs. The article demonstrates a holistic approach to making the required decisions.

Research limitations – Research limitations impose conducting a study in a specific culture and the organizational context of Lithuania.

Practical implications – Practical implications suggest that the conducted research helps the leaders of various levels at educational establishments make the most useful necessary decisions for the institution in an emergency.

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This is an Open Access article distributed under the terms of the Creative Commons Attribution License (https://creativecommons. org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited. *Originality/Value* – The uniqueness of the conducted research lies in the first attempt to show management solutions worked out by the universities in Lithuania during the COVID-19 pandemic.

Keywords: university management solutions, online studies, studies during the COVID-19 pandemic.

JEL Classification: I23.

Introduction

Higher education is an integral part of developing a modern state and society. Thus, Chou et al. (2017) single out several reasons one of which is the massive scale of higher education. The second one is related to the increased role of science in certain areas of policy such as societal challenges of climate change, aging, etc., thus expecting relevant research on higher education and suggested solutions. The need for society to seek a guarantee of a career and better quality of life at university in the future has introduced some measurements to university life at all levels. This has caused both tension and additional management work and is widely discussed in the scientific discourse. "The demand for counting, measuring, ranking, quantifying, evaluating and judging work done by universities (along with those who labor and study in educational establishments) haunts virtually all aspects of our work [...]" (Peseta et al., 2017). Olssen and Peters (2005) analyzed the ideas of neoliberalism in higher education and emphasized the focus of universities on high efficiency and strategic planning assessing anything and everything that could be measured. Strategic planning is a vital management tool that has switched from business practice to higher education to achieve organizational effectiveness (Gerulaitis et al., 2012). Strategy implementation has to be a holistic system (Segatto et al., 2013).

Thus, higher education management has been a widely researched topic in recent years. Chou et al. (2017) distinguish two research trends. The first one includes policy actors such as ministries and organized sectoral interests. The second one embraces the importance of the existing political-management structures. The authors of the article contribute to the development of the second trend of research and analyze the decisions made by university authorities to help with managing the challenges of the COVID-19 pandemic. The research problem is working out effective university management solutions during the COVID-19 pandemic. The research object is management decisions made by university authorities during the COVID-19 pandemic. It should be noted that this is the first Lithuanian-wide study revealing management decisions made by national universities during the pandemic. The situation country-wide has not been analyzed from a historical perspective. The above-mentioned facts support the study of the article as a unique investigation. The analysis of qualitative data described in the article complements the theoretical considerations of scientists with the practical examples of emergency management, which encourages further scientific discussions, the supplementation of the available management theory, and other types of developing management science.

Scientific sources provide various models for classifying higher education management methods. Capano (2011) summarizes and distinguishes four methods, including hierarchical, procedural, steering at a distance, and self-governance. In recent decades, higher education policy in Western countries has been reformed and characterized by the steering at an online mode, however, strong national interpretations of this mode have remained, and significant national diversity in the methods of higher education management has been observed to date (Capano, 2018). Diversity has been under the effect of the previously inherited higher education system and the peculiarities of the national policy. Dobbins (2017) points out three larger, historically based types of higher education management: a state-centered model, an academic self-governance model, and a "marketized" model.

The Law on Science and Studies of the Republic of Lithuania (2016) defines the autonomy and accountability of higher education institutions as follows: "A higher education institution has an autonomy that includes academic, management, economic and financial management activity based on the principles of self-governance and academic freedom". Among other rights, higher education institutions may determine the order of studies, an individual structure, internal work order, etc. Thus, universities in Lithuania have much space to solve internal issues. The responsibility for the management of each university is shared by the University Council, the University Senate, and the Rector who is the University's chief executive officer. Hence, during the lockdown, Lithuanian higher education institutions have autonomously analyzed the problems and challenges of organizing online learning and decisions made at the institutional level.

Higher education institutions are integrated establishments the activities of which cover teaching, science, and service provision. Universities must respond to the needs of students, faculty members, and external actors such as the representatives of the Government, industry, and societal stakeholders (Wise et al., 2020). Thus, university management poses some challenges. Proper university management has been proved to have a significant effect on the teaching quality of staff and student satisfaction (Muhsin et al., 2020). Kok and McDonald (2017) single out eight elements determining the successful work of academic departments: change management, leadership, communication, departmental dynamics and culture, direction, strategy and shared values, staffing, and mentoring, rewards, research, and teaching, organization, and structure. The research performed by the authors of the article demonstrates that successfully operating departments are open to changes, have more clarity of trends and goals, foster a culture of collegiality, trust in and frequently communicate with the head of the department, employees feel autonomous, etc.

However, all the research on the conditions for successful management of higher education institutions until now has focused on normal life and work circumstances, while this article is aimed at analyzing university management decisions during the COVID-19 pandemic. The study carries the significance of the decision-making of university authorities, aiming to achieve a quality study process and making decisions regarding the overall expansion of distance learning.

1. Literature review. Transition to online teaching: key issues and challenges

Living under conditions of social isolation has affected all areas of life, including the education sector. UNESCO (n.d.) provides that until 1 April 2020 schools and higher education institutions were closed in 185 countries thus affecting 1,542,412,000 or 89.4% of all learners worldwide. The COVID-19 pandemic and announced quarantine forced educational institutions to reorganize work and switch to online and teaching and training in a short time. The emergency prompted the urgent search for solutions ensuring a different but uninterrupted work process.

In March–April 2020, The International Association of Universities conducted a survey (Marinoni et al., 2020) that involved the representatives of faculties, the authorities of institutions, and the members of department management teams from 424 higher education establishments from 109 countries all around the world. Two-thirds of the respondents stated that the studying process had moved to online learning, and the main challenges that accompanied the induced changes covered technical infrastructure, online teaching competencies, and pedagogy, and specific requirements for the fields of study.

Thus, educational technologies turned into an integral part of the studying process in every higher education institution in the last decade. The application of modern technology in studies has become particularly relevant during the COVID-19 pandemic. Higher education institutions transferred the studying process to the online mode, which resulted in the increased need for hardware like computers, microphones, webcams, various software, LMS, etc. Ali (2020) notes that to ensure successful online learning, higher education (HE) institutions must possess the basic ICT infrastructure, and teaching staff must own ICT tools and have access to software and teaching platforms. The HE institutions that had not acquired the above-introduced instruments were forced to choose ed-tech services and tools, which has created a sellers' market where ed-tech companies have eagerly jumped on the opportunity to provide their services' (Teräs et al., 2020). Plentiful supply has become a challenge for the institutions to choose appropriate online work tools in line with varying criteria. However, the technical side of online learning has become a serious problem for individual users, teaching staff, and students involved in the studying process, working from home and frequently using personal equipment. The Internet connection, for example, may have a strong impact on the course of a lecture, because "online learning in its entirety is dependent on technological devices and the Internet" (Adedoyin & Soykan, 2020). A slow or broken Internet connection may significantly degrade the quality of an online lecture. It should also be noted that the acquisition or upgrade of hardware has become a substantial financial burden for higher education institutions, and therefore the limited financial resources and a large budget deficit of universities are identified as another challenge of online learning (Almaiah et al., 2020).

Having sufficient technical resources is not enough, as the ability to use them properly and effectively both technically and methodologically plays a crucial role. A large proportion of teaching staff lacked online teaching experience before the pandemic. Stukalo and Simakhova (2020) point to 86% of such teachers in Ukraine. A quantitative study conducted by the authors of the article revealed a significantly smaller percentage of such teachers in Lithuania thus making 51%. The gained experience shows that for ensuring effective online teaching, training sessions on online education methods for teaching staff are required (Stukalo & Simakhova, 2020). The methods for active student involvement online have become a burning issue, and therefore highly relevant "Flipped Classroom" and other similar methods suitable for online learning have started to be extensively used.

Promoting ICT application competencies of both teaching staff and students is another highly important prerequisite. Although the use of ICT in universities is hardly accepted as a novelty, the pandemic has shown that this aspect has posed considerable challenges for some participants in the studying process. The survey of the students learning abroad was conducted on the www.educations.com website and showed that as many as 41.5% of the respondents feared a lack of experience for teaching staff to teach remotely. Kedraka and Kaltsidis (2020) presented a study on students 61.3% of which agreed that e-learning was negatively affected by the teaching staff problems of managing an e-learning platform. It seems that an insufficient ability to apply modern technology may have several reasons. On the one hand, it should be mentioned that the teaching staff who previously had not worked online did not shift a strong emphasis on the need for employing technologically more sophisticated tools or learning platforms. On the other hand, it may also be related to individual character traits. Based on the research carried out by Heinonen et al. (2019), four types of teaching staff are distinguished considering the approach to the application of educational technologies. The first category is represented by Active Developers, the so-called enthusiasts, or initiators, who willingly apply technology personally or together with their colleagues to try new hardware. The second category involves Adaptive developer practitioners who look pragmatically at the benefits of ed-tech. The third category brings together Cautious Developers having less experience, in no hurry to apply ed-tech, and waiting for convincing evidence that the employed technology will bring the benefit of teaching students. The fourth category stands for Reluctant Developers who are resilient to changes, skeptical, negative, and cynical about the application of technology. The authors mainly conclude that "if teaching staff view themselves as competent and confident technology users, they also view technology as compatible with their practices and value for themselves and/or their students and the circumstances for development as supportive" (Heinonen et al., 2019). The third possible reason may provide that educational technology used in higher education often carries a top-down character, whether at the national or institutional level: "... most internal processes regarding digitization might be recognized as top-down initiatives and most likely management-led rather than influenced by academic staff"(Tømte et al., 2019). Although the authors point out that digitization is also going the other way around, i.e. under the initiative of "bottom-up" academic staff, a frequent top-down process is likely may lead to a reluctance to use ed-tech, i.e. a certain rejection reaction.

Student ICT application competencies have been found to cause less concern during the pandemic: "As expected, this emergency e-learning experience showed that student digital skills seemed to be far exceeding most of their instructor proficiencies" (Osman, 2020). However, various sources point out that barely all students of digital natives demonstrate a high level of digital competence, and low digital competencies of both teaching staff and

students are liable to lack behind in online learning (Adedoyin & Soykan, 2020). Daniela et al. (2018) notice that teaching staff frequently believe students are well versed in modern technology, however, the application of technology in the studying process discloses that student digital competencies are not sufficiently developed. The global student survey shows this also depends to a large extent on a geopolitical region because students differently assess their computer skills, the ability to use online learning platforms in particular: the students of Oceania and North America fully trust, while those of Africa lack trust in their competencies (Aristovnik et al., 2020).

As mentioned above, specific requirements for the areas of study or course units were the third obstacle to transition to online learning. A survey conducted by *Times Higher Education* (n.d.). revealed the reasons why hardly all high schools switched to online learning during the first lockdown in 2019. 60% of the surveyed respondents noted the main reason was a few course units that could not be taught online. The course units such as computer science, business, management, and social studies were found to be more appropriate. However, engineering and technology, medicine and dentistry, biological sciences, agriculture, and related subjects, etc. were assessed as little suitable or completely unsuitable for online learning. Zawacki-Richter (2020) points out that "particularly in subjects with a high proportion of laboratory work and internships, a rapid switch to digital is hardly feasible". Undoubtedly, the problems of teaching itself and assessing student performance were encountered: "The assessment of student performance in online environments remains to be a challenge to both instructors and students, particularly the assessment of practical skills, technical competencies, and teaching practicum" (Osman, 2020).

In general, although technology is an integral part of online learning, still, it does not play a key role in the enhancement of online studying quality in both a pandemic and safe environment: "Ensuring quality in online education is not primarily a question of IT support, but of academic strategy and educational design" (Gamage et al., 2020). An important point is to make the e-learning strategy a part of an overall institutional strategy covering pedagogical models and innovations. "The other quality elements of the institutional e-learning policy embrace institutional support, course unit development and structure, teaching and learning, student support, faculty support with compulsory e-learning training for the new members of teaching staff, technological infrastructure, student assessment (learner authentication, work authorship, and examination security) and certification and electronic security measures" (Huertas et al., 2018).

Actually, university authorities must regularly monitor faculty and student satisfaction with online education organizations (Stukalo & Simakhova, 2020) and identify and meet the needs of teaching staff and students (Ali, 2020).

2. Methodology of the current research

To conduct a qualitative study, the phenomenographic research methodology was employed. The devised strategy is based on the view that people understand and perceive phenomena differently but their perceptions are interrelated. The goal of the strategy is to present a variety of aspects describing the experience of a particular phenomenon (Žydžiūnaitė & Sabaliauskas, 2017). The article is aimed at analyzing university management decisions during the COVID-19 pandemic thus emphasizing the impact of the decisions made on the effective management of the situation.

Research methods include the analysis of scientific literature and qualitative content analysis. A semi-structured in-depth interview method was used. Research questions were developed by the authors of the article to analyze the attitude of experts to the decisions made to manage the situation during the COVID-19 pandemic. During the semi-structured in-depth interview, the experts were asked questions covering nine areas: 1) goals set by university authorities in an emergency; 2) actions ensuring the studying process; 3) actions that assisted in handling an emergency; 4) reaction of the academic community (students, teaching and management staff) to changes in work organization before, during and after the quarantine; 5) encountered problems and adopted solutions for organizing online teaching/ learning; 6) success and factors in determining achievements; 7) changes in the decisions made after the recurrence of the quarantine; 8) impact of work experience under quarantine conditions on the organization of the forthcoming studying and training process; 9) collaboration with companies and other institutions.

The critical selection of informants was utilized for demonstrating a deep understanding of the phenomenon. The qualitative research involved the three largest Lithuanian universities two of which were located in different cities and were technical universities and the third one was a classical institution. The aim of using such selection criteria was to obtain the widest possible coverage of the information. The interviewees were university authorities, including vice-rectors for studies, the directors of studies and online studying, the deans of different faculties, and a vice-dean. Thus, the study involved 15 experts – 12 men and 4 women. All experts were awarded a master's and the majority – a doctor's degree. The experience of the management work of the surveyed respondents made at least 10 years. Research data were obtained in line with research ethics and summarized hiding information on respondent affiliation to the city, a university s/he represented or the current position held.

A qualitative study was conducted in July 2020. Survey data were collected using the ZOOM video conferencing platform. Analyzing the data, the answers of the experts were grouped according to the meaning and respective categories were created. Data analysis identified descriptive categories and the outcome space of the concept expressed by a network of logically related, hierarchically organized, and systematized categories (Akerlind, 2005; Reed, 2006). The analysis of phenomenographic research was carried out in the following 7 stages: familiarisation, compilation, reduction, grouping, preliminary comparison of categories, the naming of categories, contrastive comparison (Dahlgren & Fallsberg, 1991).

3. Results of the current research and discussion

The analyzed data on qualitative research hierarchically established the categories of solutions describing university management and the outcome space of the concept (Table 1).

Categories	Management decisions made by the university	Research focus / a question to be raised by university authorities
Management actions	To centrally allocate a preparatory period at the institution level for planning online studies, draft documents regulating temporary studies, respond flexibly to changes in the circumstances of work and study.	What are the management actions taken by university authorities in the event of a pandemic?
Collaboration between the different levels of management and the academic community	Decision-making should be conducted in line with the principles of autonomy, accountability, systematicity, and partnership through a collaboration between university authorities and the faculty management team in response to the experience gained by the full academic community throughout the online studying process.	What is the basis for the decisions made by university authorities?
Development and promotion of the technical base	University authorities must create/ improve the technical base in collaboration with the IT department.	What initial decisions should be made to pursue online studying?
Timely and continuous academic support for teaching staff	Teaching staff should be trained in the use of online teaching tools during preparation and online learning processes inviting experts and encouraging the exchange of good practice between teaching staff.	What support should be given to the academic community?
Miscellaneous support for students	University authorities should pay close attention to additional student support measures.	
Control over the studying process	University authorities should ensure and encourage teaching staff to deliver lectures in consonance to the established study schedule excluding the possibility for students of self- directed learning.	What forms of control should be employed for ensuring the online teaching process?
Ensuring security	University authorities should strive to ensure the security of human health, personal data, and communication.	What forms of security should be ensured?

Table 1. Categories describing university management decisions made during the COVID-19 pandemic (created by authors based on qualitative research)

4. Management actions

Centralized preparation/transition to online learning. The critical situation caused by the COVID-19 pandemic forced national universities to transform the studying process and work in the classroom to the online mode. Two options were selected: the authorities of the majority of universities decided to take a two-week break for preparation, while some carried on their studies without any groundwork. Noga (2018) provides that defined goals and task

preparation are the essential stages of the successful management and implementation of the planned objectives. Piekarz (2008) mentions three functions, including planning, organizing, and control, important for the implementation procedure. Thus, the results of the study show that a more effective plan included the centralized preparation of online studying on a university-wide basis.

Most of the experts emphasized the importance of the two-week preparatory stage in changing the format of studies and work: "In a two week-time time, we've really come up with a very thorough plan, main points, communication methods, feedback to teaching staff, training courses, issued orders, etc. It was obligatory" (13INF). The preparation period was first needed to adapt emotionally because everyone felt great anxiety about the uncertainty of the future. Second, centralized decisions on necessary equipment (including testing) were made, changes in the academic calendar of the school year were induced, and additional training and adding material to the Moodle system was followed to have a sufficient amount of support material to ensure the studying process. Besides, the specificity of studies and the organization of laboratory work had to be considered when making decisions. Moreover, one of the developed solutions was the redistribution of human resources: "Plenty of inquiries were made, and therefore several people instead of a single person were employed to respond to the questions and solve problems encountered by certain students" (2INF).

Thus, a judgment on managing the situation to make decisions and adhere to the issues centrally at the university level proved to be worthwhile: "Possibly the good management of university authorities assisting faculties and departments creates centralized management which is one of the reasons for managing studies" (5INF). "The effective implementation of the strategy is pivotal for the development of the company and is one of the most important challenges faced by managers to solve any evolving organizational problems" (Szarucki, 2015).

The universities that failed to have a break to commence the preparation period experienced reduced quality studies as a consequence. 11INF stated that "it looked like the reached decision made the studying process uninterrupted because university authorities realized that in the case of the announced two-week holiday the situation would remain the same and take a form of two-week delay".

Management decision-making. Timely decisions made by the executives managing studies played a substantial role due to "the rapid mobilization of the staff who coordinated the process and did training" (11INF). Centralized management at the Senate level: "We accepted that some of Senate powers could be handed over to the Rector. However, the Senate refused and decided to meet when needed to make timely decisions" (8INF). Rectorate meetings were held weekly and "most of the questions were specifically devoted to studies" (2INF). Departments of studies also planned ahead. For decision-making, some members of the department management team considered the experience of foreign universities: "another point is the examples of foreign universities because we had to attend meetings with the colleagues from foreign universities and our other networks we had been involved" (11INF). All faculties and other departments of higher education institutions should follow the decisions made by university authorities without interpreting or adapting them to individual cases to reduce confusion about online learning under emergency conditions. Preparing study documents. Some documents regulating studies were prepared. A large number of legal acts, mostly temporary legislation regulating changes in the studying process, were drafted. The final theses were the biggest challenge, and therefore these papers were given serious attention in the process of preparing documents. Some universities followed the subordination principle. The most important documents and decisions related to the studying process were made by the Senate, although the Rector might also adopt temporary procedures, "which allowed changing university legislation that was within Senate competence related to the organization of the studying process. The legal acts were adopted and amended by the Senate that attentively and sincerely worked almost every week to discuss and make decisions" (8INF). A few faculties of the universities preferred the second option and adapted the central order on an individual basis: "We issued the instructions already based on the guidelines of the central administration" (6INF). Such decisions shall not be considered effective and shall constitute a breach of the general procedure.

Hence, in the event of an emergency, the authorities of higher education institutions should approve the documents regulating the procedure for temporary online studying in line with the principle of collegiality. This means that the documents approved by legislation or supplementary recommendations would cover the specificity of all faculties, which would ensure a smooth and uniform studying process throughout the higher education institution.

The harmonization of flexible work methods during the quarantine. Piekarz (2008) claims that the flexibility of actions must be ensured in the implementation area. During the quarantine period, university authorities sought to ensure the quality of the studying process, made exceptions centrally or at the faculty level, and provided safe conditions for teaching staff to work on university premises. Safety was ensured by pre-scheduling arrival (2INF), providing face masks, protective shields, and disinfectant fluid (15INF). Work on university premises took place for two reasons; first, special hardware was required for delivering lectures; second, teaching staff did not have working conditions at home due to technical internet disruptions or family circumstances.

In addition, other solutions were flexibly sought to achieve the intended learning outcomes. The organization and execution of laboratory and work practices posed many challenges, and therefore appropriate decisions were made. One of the experts explained that "some members of teaching staff moved laboratory work to another term, while others introduced new software [...]" (14INF). There were cases when "some projects were replaced with written assignments or a format available online" (7INF). Performing practices were subject to type and specificity. For cognitive internships, some found alternative and creative solutions: "either company acted online to show a certain video and make a presentation, or teaching staff did presentations and gave students an assignment to search for the learning material themselves and perform related tasks" (2INF). Most career internships were transferred to the next term in exchange for other course units, except for the practice of medical students.

5. Collaboration between the different levels of management and the academic community

Communication between management teams and the community. Effective management during the COVID-19 pandemic was greatly influenced by centralized management, the ability

to cooperate in decision-making, and the communication of authorities with the community. Szarucki (2013) claims it is important to organize hierarchical, functional, technical, and information relationships between departments and units, which is emphasized by all experts naming different addressees and the means or goals of communication.

First, communication between the different levels of management includes university authorities, the deans and vice-deans of faculties, and the heads of departments. The experts provide that efforts have been made to manage the flow of information to avoid unverified information and unweighted decisions and to cause less panic among employees. Under the guidance of others, there is a need for constant interaction: "I personally talked to the heads of departments because it was important that no one would be left forgotten under conditions of working online" (5INF). Communication between managers at different levels was based on the principle of accountability when decisions and information dissemination took place from the top to the bottom and vice versa. Bartkute and Kraujutaityte (2007) discuss that in the anticipation of high-quality higher education, it is vital to model management strategies for an academic organization in line with the categories of institutional autonomy, operational efficiency, and accountability. The findings of the study show this also promoted collaboration between different faculties that exchanged or provided support to each other with the necessary hardware: "we gave a part of laptops to the Faculty of Chemistry because we had the unused ones" (15INF).

Second, communication between university authorities and teaching staff is crucial in explaining the importance of decision-making. Moreover, the deans of some faculties put a lot of effort into communication with teaching staff: "we had many meetings and were online together every week to share the gained experience and discuss various issues" (5INF). Communication covered explaining solutions, exchanging good practices, ensuring a positive psychological climate, and maintaining team spirit, and established traditions to show that the community might always expect support. Ullah et al. (2020) notice that a focus on motivated employees is very important because pro-socially motivated employees are a source of higher performance and productivity. Erum et al. (2019) propose that called employees flourish at the workplace and are more engaged in their work. When employees feel their call to a particular job, they experience congruence between their interests, skills, and the job position (Hagmaier & Abele, 2015), which leads to greater job and life satisfaction and reduces frustration, regret, and dissatisfaction (Berg et al., 2010). From the organizational perspective, managers always look for employees who are satisfied, committed, creative, and achieve high performance (Gruman & Saks, 2011; Rothbard & Patil, 2012).

Third, staying in touch with the students online learning for which also posed considerable challenges was accepted as a serious issue. Students were informed mostly by e-mail, although meetings were held employing Zoom. Apart from various recommendations for online learning being developed, interaction with students finds relevant explaining the decisions made and clear communication on the questions that are not completely clear, why this is the case when more accurate information is available, and other various recommendations for online learning.

The authorities of higher education institutions should make use of video conferencing and collaborate closely and systematically with the heads of units at the different levels of the institution and the academic community, particularly teaching staff, to explain the expediency of the decisions made at the level of the higher education institution. The heads and management staff of faculties should also regularly be in touch with the teaching staff of the faculty and students, in particular, to provide them with the expediency of the universitywide admitted documents, explain emerging difficulties and coordinate/organize support for offering technical facilities or other types of academic assistance.

Management support for the community. Ullah et al. (2020) research results indicate that perceived organizational support and proactive personality are the drivers of prosocial motivation. Organizations should always provide support for their employees that encourage them to show more desire to help their colleagues in the working environment and foster their commitment towards their organization.

One of the forms of collaboration includes management providing support for the academic community. Certainly, technical support has also been mentioned, however, this is accepted as a direct function of managers to provide employees with appropriate hardware. Still, the analyzed results of the survey show that more than half of the experts emphasized the creation of an additional online block/page/section on the website publishing all required and constantly updated information. One of the experts discusses "methodological and technical information for teaching staff, advice for students, information for researchers, managers, and all members of the community. Relevant questions are systematically presented and updated in order people can have a single access point – one box" (111NF). Besides, some universities offered another format of communication that allowed teaching staff to be guided over the phone: "We tried to respond to as many calls as possible, more intensively communicate with teaching staff, identify their problems and promptly solve the issues so that the others should avoid asking the same questions" (31NF).

Authority consideration for community views. Successful quality studies during the quarantine were determined by the fact that university authorities or faculty management responded to the opinion of teaching staff conducting online learning, quickly solved the encountered problems, and carried out prevention. "Following each lecture, teaching staff [...] identified problems" (1INF). "Nevertheless, studies vary in different faculties, and therefore it was very important to consider the nature of studies" (2INF). This provision of teaching experience to university authorities ensured the preparation of temporary documents regulating the studying process and covering a wide range of study programs offered by different faculties. An important point is that other activities concerning community opinions were carried out at the university. For example, 8INF states that "they took into account a very strong desire of the community to have a live diploma award process". The students also agreed it was a really special celebration. We preserved the tradition and, on the other hand, received positive external feedback and increased the visibility of the university.

Work done by vice-deans in faculties. To properly analyze management-made decisions on the studying process, the contribution of vice-deans for studies should be emphasized to ensure smooth online learning throughout the quarantine period. This situation was highlighted by around half of the experts who affirmed the inter-collaboration of vice-deans for studies, their ability to manage information received through virtual meetings from deans or university authorities, share it with teaching staff and students, and provide feedback to management and university authorities. One of the experts confirms that "the arrangement of studies at faculties depended strongly on vice-deans for studies. The work done was smooth" (8INF). "We immediately formed groups through *Teams* with vice-deans for studies and kept in touch constantly to find out the situation at the faculty, including the preparation of teaching staff and management members, types of assistance that might be required for teaching staff, etc." (13INF).

6. Development and promotion of the technical base

Technical supply for the members of the community. During the COVID-19 pandemic, Lithuanian higher education institutions provided all kinds of assistance, including technical, academic, informational, psychological, and financial, to the academic community.

The creation of/advancements in the technical base was one of the main activities intensively carried out by universities during a two-week preparatory period and throughout the online studying process at the later stage. First, decisions were made and Zoom video conferencing software licenses were purchased, which created the opportunity to deliver 40 minute-long lectures with no interruption. Second, other types of hardware the need for which was learned from faculties was offered. To indicate the need, surveys were conducted for both teaching staff and students: "All students of all faculties were asked to indicate the need for the Internet or computers" (15INF). In full measure, a part of the hardware was purchased, and most of the available equipment was distributed for work at home in line with the analyzed need: "We shared tablets and even desktop computers" (6INF). "The provision of technical facilities in the home environment for everyone who needed it was ensured" (5INF). Third, the authorities of some universities decided to set up additional lecture halls to record lectures for faculty needs: "We bought hardware and made two recording studios one on X Street where we owned our houses and the other at the university to make it easier for teaching staff to record lectures" (6INF). Thus, concerning Bartkutė and Kraujutaitytė (2007), quality assurance of applying information and communication technologies is one of the crucial parts of high-quality studies.

7. Timely and continuous academic support for teaching staff

The analyzed research data indicate two trends – first, support was offered to teaching staff through centralized decision-making, and second, the initiative was supported by the staff of online learning centers. Thus, joint decision-making is more effective due to systematicity, feedback, and obtaining information through joint management meetings.

Lithuania's Progress Strategy "Lithuania 2030" (Lietuvos Respublikos Seimas, 2012) emphasizes the importance of learning, and therefore modern and dynamic society ready for the challenges of the future and able to operate in the constantly changing world. Hence, the pandemic particularly strengthened the development of educational competencies and the introduction of innovations in the studying process, which was endorsed by university authorities. *Teacher training in working online*. Most of the experts highlighted the significance of providing initial and, subsequently, ongoing assistance to teaching staff in mastering online learning tools during the preparation period. The experts assume "there was a constant support for teaching staff, including a large number of instructions and intense teaching staff training. All possibilities for calling and immediately receiving advice, even during the lecture, were created" (5INF); "the e-learning technology center conducted training on how to use tools and prepared instructions for ZOOM, Teams every week, sometimes twice a week" (13INF).

Providing didactic assistance for teaching staff. In addition to teaching staff training, information was sent by e-mail, through various recommendations and recordings that should help prepare or conduct online lectures. Recommendations were wide-ranging: "Material such as guidelines on Zoom, Moodle, etc. arrived very quickly. Later, instructions and short video reports helped a lot. I had not been granted any credits using Moodle before, but found all methodological material online, easily made tests, and managed to administer exams" (4INF).

Farashahi and Tajeddin (2018) demonstrated that student learning was more effective when applying active studying methods. The majority of authors (Lage et al., 2000; Bergmann & Sams, 2012; Artero Escartin & Domeneque Claver, 2018; González-Fernández & Huerta, 2019; et al.) suppose that online, partially online, or mixed learning processes are most frequently related to the inverted class method. However, regardless of the selected online learning method, the most important points of the online learning process are student through promotion self-learning, interaction with teaching staff, and planning activities, including the preparation of an appropriate environment, the use of multimedia, and a proper and accepted evaluation system. In general, the teaching-learning process is related to Information Technologies and the application of games in this process (De Jorge-Moreno, 2020).

Exchanging a good practice among the members of the teaching staff. The exchange of good practice was another decision on assisting teachers. This was done either on a university-wide basis or within the faculty. The importance and positive impact of the decision on studies were emphasized by several experts: "it was done inside the faculty, i.e. on the initiative of our teaching staff members advanced in the use of technology" (14INF). The majority of the experts agreed that such sharing was very effective: "Meetings on exchanging experiences were the most effective methods" (5INF). It should be noted that if the general issues of training in online work most frequently were discussed at the beginning of the quarantine, the exchange of good practice was usually organized later thus deepening teaching staff competencies. Student assessments were agreed to be a critical issue for all members of teaching staff: "Most members of the teaching staff were actively involved in sharing with each other information on how to organize assessments and testing" (15INF).

Thus, during the quarantine period, management encouraged and supported sharing a good practice, which is an innovative format of competence development. It should be noted that both teaching staff and other members of the academic community used to share a personal experience: "Library staff quite intensively exchanged information about the latest international sources because a large number of different repositories were open" (10INF). Consequently, to ensure quality studies, timely and systematic academic (ICT, didactic,

psychological) support is required for all members of the teaching staff at both the institutional and international level, which is a duty of the academic, didactic, etc. department flexibly considering the emerging needs of teaching staff across the higher education institution.

8. Miscellaneous support for students

Developing additional support measures for students. During the quarantine period, university authorities paid special attention to the students of the higher education institution applying several measures. It should be noted that providing hardware was only one of the forms of support, while other methods concentrated on academic and financial assistance. Some experts acknowledged that the application of the single access point principle assisted students with acquiring all basic information in one place. First, in terms of academic support, "unified questions-answers were developed on the website in order as many people as possible could access and read the necessary information. A common mail was created for the students who were able to apply at the very beginning of the quarantine period. Each problem was addressed directly both in the quarantine dormitory and other places" (2INF). Second, if needed, students were granted a social allowance as a form of financial support: "Everyone was informed about the possibility of receiving social allowances" (11INF). In addition, "our decision encouraged students to reach personal verdicts. For example, non-Vilnius residents could stay with their parents at home and be sure it would not require additional funds. Those living in dormitories terminated their contracts and were back home to their parents" (8INF). In the event of an emergency, the authority/faculty management of the higher education institution should work closely with the members of the Student Body and respond to the expressed reasoned opinion.

Psychological assistance. Psychological help could be singled out as a separate form of support for students. This was emphasized by some chief executives of the universities: "We had two psychologists, and therefore asked to make recommendations for both students and teaching staff" (13INF). Apart from these key factors, attention should be paid to miscellaneous support for students, including international students, the revision, adaptation, and/or preparation of study resources for online learning, opportunities, and methods for ensuring the academic integrity of assessments.

9. Control over the studying process

Online lectures monitored by faculty management members. Considering control over the studying process, academic freedom as the essential philosophical value of universities should be mentioned. Nevertheless, control over the quality of the studying process is one of the procedures for ensuring quality studies. Noga (2018) argues that control over the implementation process for managing changes is treated as one of the crucial processes of managing strategically planned situations. Still, process control was mentioned only by a few experts. However, the analysis of the obtained research results in various sections shows that control over the studying process pays off under severe study conditions. Thus, students are hardly left to work independently and are offered the traditional format of contact learning

online. 5INF: "The faculty decided to check schedules for the first two weeks. Although we found it drastic, we realized that teaching staff perfectly understood instructions, and therefore later stopped checking" (5INF). "The heads of departments followed the process, and I sometimes inspected whether people were online for their lectures at the scheduled time or whether they announced Zoom sessions" (4INF).

10. Ensuring safety

Three types of security to which university authorities paid particular attention were identified.

Ensuring the safety of human health. The first objective primarily focused on ensuring the safety of people by eliminating their contacts employing various security measures: "Students were not allowed to enter university premises. The quarantine itself sets the tone for special security, the distance between people, disinfection, etc. Certainly, it was assured and pursued there would be no gathering of people. Room space was used by a single person only. Masks were obligatory. All above introduced national-level recommendations were followed all the time" (2INF). Where possible, innovative technological security measures were employed: "The Life Sciences Centre has good technical conditions for restricting access to certain individual spaces or premises, i.e. regulating flows, properly monitoring work schedule and habits, etc. Laboratory work did not completely stop and was done on schedule. Thus, in the case of an infection, it could be traced very accurately" (8INF).

Communication security. Ensuring communication security was of utmost importance, although only very few problems were encountered: "there were cases of strangers connecting, but nothing threatening happened" (13INF). "Later, a problem with Zoom and security vulnerabilities broke out. As soon as university authorities found out about the problems, we were recommended to appraise the situation and choose a safer option if possible" (7INF).

Conclusions

The analysis of scientific sources has shown that having sufficient technical resources, improving the ICT application competencies of the academic staff, and further developing the study process and its potential adaptability based on the specific study area or subject requirements are vital for a successful transition to distance learning during the pandemic. Nevertheless, the quality of distance learning remains most dependent on academic strategy and educational design. E-learning strategy must be part of the overall institutional strategy.

The analyzed researched results show that to ensure quality studies at the level of higher education institution, four factors are of crucial importance: it is relevant to follow the decisions made by the authorities of the higher education institution (Rector, Vice-rectors, Department of Studies) and closely collaborate between different management levels of the institution and the academic community. Certainly, developing and providing a technical base for online learning is a vital issue along with timely and continuous academic support for teaching staff in improving their ICT competencies and expanding their educational approach via the application of the acquired competencies in the studying process. Apart from the above introduced key factors, the major focus should be switched onto support for international teaching staff,

miscellaneous support for students, the revision, adaptation, and/or preparation of study resources, making the required adjustments to the study program in the redistribution of course units, ensuring the academic integrity of student assessment and control over the studying process. For assuring quality studies, the conducted research has disclosed auxiliary factors such as the security of employees, communication, and personal data.

The results of qualitative research demonstrate that in the event of an emergency, the online studying process is best managed under the concentration of university authorities and department management teams and systematic communication between them. Online teaching experience accumulated before an emergency by both teaching staff and the department that manages and organizes online learning and provides support for the academic community during the quarantine has also exerted a huge impact. Human resources (university authorities, faculty management members, chairpersons of study programs, the Student Body, teaching staff) seem to be a firmer guarantee of success than the technical part of the institution. A valid point is that in line with the study performed during the quarantine period, online teaching and work have changed the attitude of the academic community thus concentrating effort on learning outcomes, problem-solving and close communication between teaching staff and students rather than complaining about the situation or creating obstacles.

The emergence situation provides that transitioning from direct to online learning and work and/or a mixed way of studies must ensure the continuity and quality of the studying process, the safety, and health of people, and proper care of community well-being within the studies.

It has to be emphasized that the obtained research results are of value for the study process not only during times of the pandemic. A part of the described processes, such as collaboration between the different levels of management and the academic community, timely and continuous academic support for teaching staff, miscellaneous support for students, is paramount for a quality study process under varying work conditions and forms. The heightened prevalence of distance learning and work during the pandemic will not only retain its current value but will also expand with a growing supply and availability of such studies. Therefore, the results of the research may become the basis for university authorities in organizing the study processes at their universities.

Upon summarizing the obtained research results, the following recommendations for higher education institutions operating during emergency periods can be derived:

- The heads of higher education institutions are recommended to approve documents, which regulate the temporary study procedures of distance learning.
- The management should be using video conferencing to cooperate closely and systematically with the heads of different levels of the institution and the academic community, especially the teaching staff, to detail the decisions made and their appropriateness at the institutional level.
- All faculties and other bodies of the higher education institution should adhere to the decisions made by the top-level management to reduce the confusion of distance learning under emergency conditions.
- Faculty leaders and the administration should also maintain constant remote contact with the teaching staff and, especially, the students of their faculty and provide them

with information about the appropriateness of the documents approved at the university level, assist with ensuing difficulties, and coordinate and/or organize support. Several limitations were encountered during the study and its analysis. First, concerning the governance context of Lithuanian universities, their autonomy, size, and specificity, some of the research results may not apply to specific universities or other types of higher education institutions, e.g., colleges. It can also be foregrounded that, rather than directly, which is more common in conducting in-depth interviews, the research data were collected using the video conferencing tool Zoom. The subjectivity factor should also be noted, as this might have affected the research results when analyzing the qualitative data. The conducted study reflects the situation of higher education institutions in Lithuania during the emergency period. Further research of similar nature could compare the experiences of different countries or geopolitical regions. It would be worthwhile to repeat the study three and five years from now if similar emergency conditions apply at the time. Such a longitudinal study would show how effective in the long term the management decisions of the university, provided and considered successful by this article, will have been.

References

- Adedoyin, O. B., & Soykan, E. (2020). Covid-19 pandemic and online learning: the challenges and opportunities. *Interactive Learning Environments*. https://doi.org/10.1080/10494820.2020.1813180
- Akerlind, G. S. (2005). Variation and commonality in phenomenographic research methods. *Higher Education Research & Development*, 24(4), 321–334. https://doi.org/10.1080/07294360500284672
- Ali, W. (2020). Online and remote learning in higher education institutes: a necessity in light of COVID-19 pandemic. *Higher Education Studies*, 10(3). https://doi.org/10.5539/hes.v10n3p16
- Almaiah, M. A., Al-Khasawneh, A., & Althunibat, A. (2020). Exploring the critical challenges and factors influencing the e-learning system usage during COVID-19 pandemic. *Education and Information Technologies*, 25, 5261–5280. https://doi.org/10.1007/s10639-020-10219-y
- Aristovnik, A., Keržič, D., Ravšelj, D., Tomaževič, N., & Umek, L. (2020). Impacts of the Covid-19 pandemic on life of higher education students: a global perspective. *Sustainability*, 12(20), 8438. https://doi.org/10.3390/su12208438
- Artero Escartin, I., & Domeneque Claver, N. (2018). Dar la vuelta a la enseñanza. Una experiencia de Flipped Classroom en Economía Publica. E-publica. Revista electrónica sobre la enseñanza de la Economía Pública, 22, 51–75.
- Bartkutė, I., & Kraujutaitytė, L. (2007). Aukštojo mokslo institucijų valdymo mokslinių tyrimų tendencijos Lietuvoje. *Viešoji politika ir administravimas, 20*, 104–112.
- Berg, J. M., Grant, A. M., & Johnson, V. (2010). When callings are calling: Crafting work and leisure in pursuit of unanswered occupational callings. *Organization Science*, 21(5), 973–994. https://doi.org/10.1287/orsc.1090.0497
- Bergmann, J., & Sams, A. (2012). Flip your classroom: Reach every student in every class every day. International Society for Technology in Education, Washington, DC.
- Capano, G. (2011). Government continues to do its job. A comparative study of governance shifts in the higher education sector. *Public Administration*, *89*(4), 1622–1642. https://doi.org/10.1111/j.1467-9299.2011.01936.x
- Capano, G. (2018). Policy design spaces in reforming governance in higher education: the dynamics in Italy and the Netherlands. *Higher Education*, 75, 675–694. https://doi.org/10.1007/s10734-017-0158-5

- Chou, M.-H., Jungblut, J., Ravinet, P., & Vukasovic, M. (2017). Higher education governance and policy: an introduction to multi-issue, multi-level and multiactor dynamics. *Policy and Society*, 36(1), 1–15. https://doi.org/10.1080/14494035.2017.1287999
- Dahlgren, L. O., & Fallsberg, M. (1991). Phenomenography as a qualitative approach in social pharmacy research. *Journal of Social and Administrative Pharmacy*, 8(4), 150–156.
- Daniela, L., Visvizi, A., Gutiérrez-Braojos, C., & Lytras, M. D. (2018). Sustainable higher education and technology-enhanced learning (TEL). Sustainability, 10. https://doi.org/10.3390/su10113883
- De Jorge-Moreno, J. (2020). Relationship between university education in strategic management and chess in a both learning process: an approach across learning paths. *Business, Management and Education*, 18(2), 226–246. https://doi.org/10.3846/bme.2020.12369
- Dobbins, M. (2017). Exploring higher education governance in Poland and Romania: Re-convergence after divergence? *European Educational Research Journal*, 16(5), 684–704. https://doi.org/10.1177/1474904116684138
- educations.com. (n.d.). https://institutions.educations.com/insights/student-survey-covid-19-and-study-abroad
- Erum, H., Abid, G., & Contreras, F. (2019). The calling of employees and work engagement: the role of flourishing at work. *Business, Management and Education*, 18, 14–32. https://doi.org/10.3846/bme.2020.11430
- Farashahi, M., & Tajeddin, M. (2018). Effectiveness of teaching methods in business education: A comparison study on the learning outcomes of lectures, case studies and simulations. *The International Journal of Management Education*, 16, 131–142. https://doi.org/10.1016/j.ijme.2018.01.003
- Gamage, K. A. A., Wijesuriya, D. I., Ekanayake, S. Y., Rennie, A. E. W., Lambert, Ch. G., & Gunawardhana, N. (2020). Online delivery of teaching and laboratory practices: continuity of university programmes during COVID-19 pandemic. *Education Sciences*, 10(291). https://doi.org/10.3390/educsci10100291
- Gerulaitis, D., Gerulaitienė, E. & Grigaliūnas, M. (2012). Strateginio planavimo ir universiteto valdymo kryptys: universiteto socialinių partnerių ir akademinės bendruomenės sutelktos grupės tyrimo rezultatai. Jaunųjų mokslininkų darbai, 1(34), 94–99.
- González Fernández, M. O., & Huerta Gaytán, P. (2019). Experiencia del aula invertida para promover estudiantes prosumidores del nivel superior. RIED. *Revista Iberoamericana de Educación a Distancia*, 22(2) (version preprint). https://doi.org/10.5944/ried.22.2.23065
- Gruman, J. A., & Saks, A. M. (2011). Performance management and employee engagement. *Human Resource Management Review*, 21(2), 123–136. https://doi.org/10.1016/j.hrmr.2010.09.004
- Hagmaier, T., & Abele, A. E. (2015). When reality meets ideal investigating the relation between calling and life satisfaction. *Journal of Career Assessment*, 23(3), 367–382. https://doi.org/10.1177/1069072714547164
- Heinonen, K., Jääskelä, P., Häkkinen, P., Isomäki, H., & Hämäläinen, R. (2019). University teachers as developers of technology-enhanced teaching – Do beliefs matter? *Journal of Research on Technology in Education*, 51(2), 135–151. https://doi.org/10.1080/15391523.2018.1564894
- Huertas, E., Biscan, I., Ejsing, Ch., Kerber, L., Kozlowska, L., Marcos Ortega, S., Lauri, L., Risse, M., Schörg, K., & Seppmann, G. (2018). Considerations for quality assurance of e-learning provision. Report from the ENQA Working Group VIII on quality assurance and e-learning (Occasional Papers 26). https://www.enqa.eu/wp-content/uploads/Considerations-for-QA-of-e-learning-provision.pdf
- Kedraka, K., & Kaltsidis, Ch. (2020). Effects of the Covid-19 pandemic on university pedagogy: Students' experiences and considerations. *European Journal of Education Studies*, 7(8). https://doi.org/10.46827/ejes.v7i8.3176

- Kok, S. K., & McDonald, C. (2017). Underpinning excellence in higher education an investigation into the leadership, governance and management behaviours of high-performing academic departments. *Studies in Higher Education*, 42(2), 210–231. https://doi.org/10.1080/03075079.2015.1036849
- Lage, M., Platt, G., & Treglia, T. (2000). Inverting the classroom: A gateway to creating an inclusive learning environment. *The Journal of Economic Education*, 31(1), 30–43. https://doi.org/10.1080/00220480009596759
- Lietuvos Respublikos Seimas. (2012). *Lietuvos pažangos strategija "Lietuva 2030*" [Lithuania's Progress Strategy "Lithuania 2030"]. https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/TAIS.425517
- Law on Science and Studies of the Republic of Lithuania. (2016). https://e-seimas.lrs.lt/portal/legalAct/ lt/TAD/81a7b822444a11e68f45bcf65e0a17ee/asr
- Marinoni, G., van't Land, H., & Jensen, T. (2020). The impact of Covid 19 on Higher Education around the world (IAU global survey report). International Association of Universities. https://www.iau-aiu. net/IMG/pdf/iau_covid19_and_he_survey_report_final_may_2020.pdf
- Muhsin, S., Martono, S., Nurkhin, A., Pramusinto, H., Afsari, N., & Fadhly Arham, A. (2020). The relationship of good university governance and student satisfaction. *International Journal of Higher Education*, 9(1). https://doi.org/10.5430/ijhe.v9n1p1
- Noga, G. (2018). Problems of adapting enterprises in the strategy implementation process. case of Poland. Business, Management and Education, 16(2), 222–238. https://doi.org/10.3846/bme.2018.6261
- Olssen, M., & Peters, M. A. (2005). Neoliberalism, higher education and the knowledge economy: From the free market to knowledge capitalism. *Journal of Education Policy*, *20*(3), 313–345. https://doi.org/10.1080/02680930500108718
- Osman, M. E. (2020). Global impact of COVID-19 on education systems: the emergency remote teaching at Sultan Qaboos University. *Journal of Education for Teaching*, 46(4), 463–471. https://doi.org/10.1080/02607476.2020.1802583
- Peseta, T., Barrie, S., & McLean, J. (2017). Academic life in the measured university: Pleasures, paradoxes and politics. *Higher Education Research & Development*, 36(3), 453–457. https://doi.org/10.1080/07294360.2017.1293909
- Piekarz, H. (2008). Implementacja strategii z perspektywy procesu zarządzania. *Studia i Prace UEK*, *1*, 244–252.
- Reed, B. I. (2006). Phenomenography as a way to research the understanding by students of technical concepts. In Núcleo de Pesquisa em Tecnologia da Arquitetura e Urbanismo (NUTAU): Technological Innovation and Sustainability (pp. 1–11). Sao Paulo, Brazil.
- Rothbard, N. P., & Patil, S. V. (2012). Being there: Work engagement and positive organizational scholarship. In *The Oxford handbook of positive organizational scholarship* (pp. 56–69). Oxford University Press.
- Segatto, M., de Padua, S., & Martinelli, D. (2013). Business process management: a systematic approach? Business Process Management Journal, 19(4), 698–714. https://doi.org/10.1108/BPMJ-Jun-2012-0064
- Stukalo, N., & Simakhova, A. (2020). COVID-19 impact on Ukrainian higher education. Universal Journal of Educational Research, 8(8), 3673–3678. https://doi.org/10.13189/ujer.2020.080846
- Szarucki, M. (2013). Dobór instrumentów formułowania i implementacji strategii. Zeszyty Naukowe Uniwersytetu Przyrodniczo – Humanistycznego w Siedlcach, 97, 333–347.
- Szarucki, M. (2015). Evolution of managerial problems from the perspective of management science. Business: Theory and Practice, 16(4), 362–372. https://doi.org/10.3846/btp.2015.684
- Teräs, M., Suoranta, J., Teräs, H., & Curcher, M. (2020). Post-Covid-19 education and education technology 'Solutionism': a seller's market. *Postdigital Science and Education*, 2, 863–878. https://doi.org/10.1007/s42438-020-00164-x
- Times Higher Education. (n.d.). https://www.timeshighereducation.com/unileaderssurveydata2020

- Tømte, C. E., Fossland, T., Aamodt, P. O., & Degn, L. (2019). Digitalisation in higher education: mapping institutional approaches for teaching and learning. *Quality in Higher Education*, 25(1), 98–114. https://doi.org/10.1080/13538322.2019.1603611
- Ullah, I., Elahi, N. S., Abid, G., & Butt, M. U. (2020). The impact of perceived organizational support and proactive personality on affective commitment: mediating role of prosocial motivation. *Business, Management and Education*, 18(2), 183–205. https://doi.org/10.3846/bme.2020.12189
- UNESCO. (n.d.). Education: From disruption to recovery. https://en.unesco.org/covid19/educationresponse
- Wise, G., Dickinson, C., Katan, T., & Gallegos, M. C. (2020). Inclusive higher education governance: managing stakeholders, strategy, structure and function. *Studies in Higher Education*, 45(2), 339– 352. https://doi.org/10.1080/03075079.2018.1525698
- Zawacki-Richter, O. (2020). The current state and impact of Covid-19 on digital higher education in Germany. *Human Behavior & Emerging Technologies*, 3, 218–226. https://doi.org/10.1002/hbe2.238
- Žydžiūnaitė, V., & Sabaliauskas, S. (2017). Kokybiniai tyrimai. Principai ir metodai. Vaga.