# Global Practices in Ensuring and Improving the Quality of Education During Crises

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## Abstract

Emergencies can hurt the activities of higher education institutions (HEIs), their resources and their management to provide quality educational services. The article aims to study the international experience of higher education institutions in managing the quality of education in crises. The methodology is based on the analysis of secondary data from a survey of representatives of 489 European higher education institutions in April-July 2023 on the main trends in higher education. The results demonstrate the change in the overall management strategies of HEIs in Europe under the influence of the coronavirus crisis and after its end. In 2023, the level of attention of universities to students' mental health increased, as did the demand for blended learning and its prevalence. Administrative staff of higher education institutions are more likely to use remote forms of employment in their activities. The practice of online acceptance of applicants' documents and online testing is becoming widespread in European HEIs. There are trends towards an increase in the importance of online marketing in higher education institutions. In the post-crisis management phase, the level of institutional readiness of European HEIs for emergencies and crisis management has also increased. The study also indicates the average level of prevalence of European HEIs' response to the consequences of the military invasion of Ukraine and its impact on the educational sector. The practical significance of the work is to identify changes in the management strategies of European higher education institutions under the influence of crises.

**Keywords:** crisis management, quality management, crises, higher education, higher education management.

## Introduction

Crises caused by insurmountable, unpredictable external circumstances significantly negatively impact the activities of universities. At the same time, the quality management system in higher education institutions is generally not well prepared for various crises (Mialkovska et al., 2024). This is particularly evidenced by the available unofficial data fro m universities on how they have responded to the effects of the coronavirus crisis in Germany, which has significantly impacted international student mobility (Kercher & Westfeld, 2020). In almost 60% of universities, students could not continue or start their studies, and 40% of institutions announced the departure

of students after the government imposed restrictions. It is estimated that almost 80,000 students have dropped out (Kercher & Westfeld, 2020). Due to the increased uncertainty caused by the coronavirus pandemic, it has been challenging to assess the needs of higher education institutions in terms of the resources required to support them.

The results of the European Association of Universities' survey on the main trends in the development of universities in the context of higher education reform in Europe, conducted in 2023, also indicate a significant impact of the war in Ukraine on the work of higher education institutions (Gaebel & Zhang, 2024). Thus, more than half of the 489 respondents from different universities have started accepting students and teachers from Ukraine.

Thus, the crisis situations caused by the spread of the pandemic and the war in Ukraine have significantly changed the activities of universities, as they have affected student mobility, migration, and the need for university support in terms of resources. The above requires a more detailed study of the international experience of universities in managing the quality of education in times of crisis.

The article aims to study the international experience of higher education institutions in managing the quality of education in crisis situations. The study focuses on the following objects: 1) factors influencing the general strategies of quality management in higher education institutions; 2) the impact of national reforms on the management of higher education institutions and quality assurance of education in higher education institutions; 3) the impact of crises on the activities of higher education institutions.

## LITERATURE REVIEW

In the context of the crisis, educational institutions need to implement technical, organisational, and pedagogical changes to move from a traditional to a distance learning model to ensure the continuity of the educational process and high quality of education (Bojović et al., 2020).

Quality management in education encompasses the strategies, structure, methods and operations by which educational institutions can assess their performance and improve the quality of education using information systems to collect data on learning processes and conduct research (Mialkovska, 2023a). Quality management is necessary to ensure that educational institutions have the ability to manage quality assurance in a targeted manner at the level of overall operations (Gherghina et al., 2009). It should be noted that crises in education can arise for several reasons and require effective management: natural disasters, problems of mass inequality (linguistic, religious, ethical) and the prevalence of a culture of exclusion in education, the coronavirus

pandemic, military conflicts and wars. Crisis management is also necessary when funding for educational institutions is reduced in the context of the economic crisis (Martínez-Campillo & Fernández-Santos, 2020). Therefore, scientists distinguish the concept of crisis management, which is interpreted as a "strategy for responding to emergency, unexpected situations with negative consequences" (Hidayat et al., 2020).

Crisis management is carried out strategically within the framework of developed strategies, administrative functions defined in long-term proactive planning, coordination, organisation, management, monitoring to reduce risks and uncertainty, control over the resources of the educational institution and the quality of educational services (Mialkovska, 2023b). Crisis management is based on programmes and tools managers and other authorised employees use in unexpected emergencies (Al-Janabi et al., 2022; Birel, 2024)).

Research on managing education quality in times of crisis is focused on identifying crucial factors and models of crisis management.

Thus, based on a survey of teachers in thirty secondary schools, Samawı (2021) identifies the most important requirements for crisis management: planning, leadership skills, information, communication and teamwork. Chatzipanagiotou and Katsarou (2023) note the important role of leadership, particularly the skills of managers, as a driver of effectiveness in secondary education management, including strategic innovation and change (clear vision, goals, and plans for implementing changes). Based on the results of empirical research, Bush (2020) also notes the significant role of leadership in resolving crises in educational institutions in different countries (USA, England, Malaysia, Nepal, and Southern Africa). The importance of crisis management skills in vocational schools in Cyprus at the pre-crisis management stage and after the crisis is noted by Tokel et al. (2017).

The literature offers various models of managing the quality of education in times of crisis, summarised in Figure 1. The pre-crisis stage of crisis management involves the use of tools for identifying crises, applying warning/mitigation strategies, prevention (Coombs, 2007; Mitroff, 1994) and preparation for a crisis (Grissom & Condon, 2021), and requires a proactive approach by managers. At the crisis management stage, educational institutions use response strategies to respond to the consequences of the crisis (Grissom & Condon, 2021). Post-crisis management involves implementing strategies to contain the effects of the crisis, recovery and learning (Mitroff, 1994). Therefore, Iacuzzi et al. (2021) investigate knowledge management strategies in the crisis response phase of the school crisis in Italy during the coronavirus crisis.
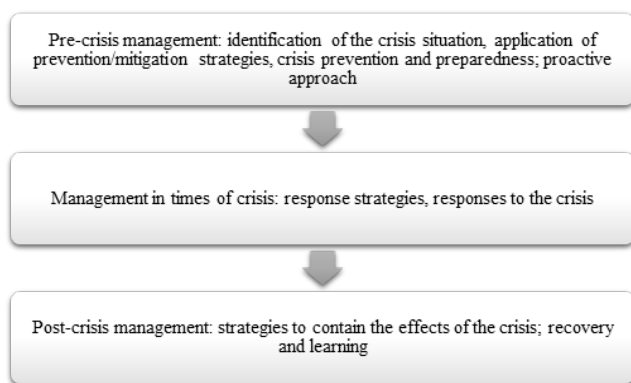
**Fig. 1: Theoretical model of education quality management in the crisis**

Source: compiled by the author based on (Grissom &
Condon, 2021; Coombs, 2007; Mitroff, 1994)

In general, the literature review demonstrates sufficient development of theoretical and practical foundations of education quality management in crisis situations. At the same time, few studies have addressed the issues of crisis management of universities after the pandemic and during the war in Ukraine, mainly on how these factors affected the strategies of higher education institutions and their response measures.

## METHODOLOGY

The study is based on general scientific methods of analysing secondary data from a European survey of representatives of higher education institutions (European University Association, 2024). Secondary data from the European University Association survey conducted in April-July 2023 on trends in European higher education institutions were used to make calculations on quality management in higher education in Europe and to respond to the crises that have arisen due to the spread of the pandemic and the war in Ukraine (European University Association, 2024). According to university respondents, 40.7% indicated that their HEIs enrolled 7.5 – 24.9 thousand students, 39.3% estimated the number of students at less than 7.5 thousand, and 14.7% – 25.0 – 49.9 thousand (Table 1).

Among the respondents, the most significant proportion of people came from multidisciplinary educational institutions – 56.6%, from specialised HEIs – 17.6% of respondents, from HEIs of applied sciences - 11.5%, from technical institutes - 7.6%, and from music or art schools – 5.1% (Table 2).

All calculations were made using the SPSS Statistics 22.0 software. In order to identify the main trends and measures to respond to the crisis, we selected issues related to the subject of the study, namely (European University Association, 2024):

**Table 1: Approximate number of students enrolled in higher education institutions in Europe, estimated by respondents based on the total number of students enrolled in the 2022/23 academic year**

| Answers | Number of respondents, people | Share of respondents, % | Cumulative share, % |
|---|---|---|---|
| No answer | 6 | 1,2 | 1,2 |
| Between 25000 and 49999 | 72 | 14,7 | 16,0 |
| Between 50,000 and 75,000 | 15 | 3,1 | 19,0 |
| Between 7500 and 24999 | 199 | 40,7 | 59,7 |
| Less than 7500 | 192 | 39,3 | 99,0 |
| More than 75,000 | 5 | 1,0 | 100,0 |
| Total | 489 | 100,0 | |

Source: calculated by the author

**Table 2: Types of HEIs whose respondents took part in the survey**

| Answers | Number of respondents, people | Share of respondents, % | Cumulative share, % |
|---|---|---|---|
| No answer | 6 | 1,2 | 1,2 |
| Generalist universities | 277 | 56,6 | 57,9 |
| Art and music schools | 25 | 5,1 | 63,0 |
| Open universities | 2 | ,4 | 63,4 |
| Specialised | 86 | 17,6 | 81,0 |
| Technical | 37 | 7,6 | 88,5 |
| Universities of applied sciences/university colleges | 56 | 11,5 | 100,0 |
| Total | 489 | 100,0 | |

Source: calculated by the author

**Question 9.** Which of the following events/factors have influenced the overall strategy of your educational institution over the past five years? Please select one option from the list.

**Question 11.** How important were the national reforms in different areas for your educational institution in the last five years? Please select one option from the list.

**Question 16.** To what extent are students involved in the management of the educational institution? Are they involved in ensuring the quality of education (e.g., conducting inspections)?

**Question 31.** Has there been an increase in various areas of the educational institution's activities in 2023 compared to before the Covid-19 pandemic? Please select the appropriate options.

**Question 49.** Has your institution taken any action in response to the war in Ukraine? Please select the appropriate options

## RESULTS

Strategies and measures for managing the quality of education in different countries depend significantly on national political, economic, socio-demographic and other conditions, including educational reforms, which are often aimed at improving the quality of education in universities.

According to the respondents, the following events had the most significant impact on the overall strategies of higher education institutions: digitalisation (82.2%), the coronavirus pandemic (74.2%), increased cooperation with other higher education institutions (66.5%), sustainable development goals (59.2%), economic development (49.1%), openness and accessibility of science (44.6%), and increased competition with other higher education institutions (42.7%). Factors such as openness and accessibility of science (44.8%), ranking of the HEI (45.8%), political development (41.7%), economic development (41.7%), geopolitical changes (41.5%), and increased competition with other HEIs (40.7%) have an average level of influence on the overall strategies of the HEI (Table 3). At the same time, secondary survey data is insufficient to identify how these factors could have influenced the crises affecting the HEIs and their overall development strategies.

**Table 3: Respondents' assessment of the impact of various events on the overall strategy of higher education institutions over the past five years**

| | No answer | High importance | Medium importance |
|---|---|---|---|
| Demographic changes | 5,1 | 36,8 | 39,1 |
| Migration and related changes | 6,5 | 20,4 | 37,6 |

| | No answer | High importance | Medium importance |
|---|---|---|---|
| Political development | 5,3 | 33,1 | 41,7 |
| Economic development | 3,5 | 49,1 | 41,7 |
| Geopolitical challenges | 7,4 | 26,8 | 41,5 |
| Digitalisation | 2,7 | 82,2 | 13,7 |
| Sustainable development goals | 3,9 | 59,5 | 30,7 |
| The Covid-19 pandemic | 3,3 | 74,2 | 19,8 |
| Openness and open access to science | 3,9 | 44,6 | 44,8 |
| League rankings and tables | 5,1 | 29,4 | 45,8 |
| Increased competition with other universities | 3,5 | 42,7 | 40,7 |
| Expanding cooperation with other universities | 3,5 | 66,5 | 27,6 |

Source: calculated by the author

According to the respondents, national reforms in their country's education sector were highly and moderately important for universities' institutional funding (61.8% and 19.8%, respectively). However, 9.8% of respondents indicated the absence of reforms in the education sector at the national level, and only 4.5% claimed that they had no impact on institutional funding (Table 4).

**Table 4. Assessment of the level of importance of national reforms in the education sector for HEIs in different areas of their activities**

| Answer | Number of respondents, people | Share of respondents, % | Cumulative share, % |
|---|---|---|---|
| *Institutional funding* | | | |
| No answer | 20 | 4,1 | 4,1 |
| High importance | 302 | 61,8 | 65,8 |
| Medium importance | 97 | 19,8 | 85,7 |
| No reforms in the last five years | 48 | 9,8 | 95,5 |
| Low importance | 22 | 4,5 | 100,0 |
| Total | 489 | 100,0 | |
| *Governance and autonomy* | | | |
| No answer | 13 | 2,7 | 2,7 |
| High importance | 251 | 51,3 | 54,0 |
| Medium importance | 127 | 26,0 | 80,0 |
| No reforms in the last five years | 68 | 13,9 | 93,9 |

| Answer | Number of respondents, people | Share of respondents, % | Cumulative share, % |
|---|---|---|---|
| Low importance | 30 | 6,1 | 100,0 |
| Total | 489 | 100,0 | |
| Ensuring the quality of education | | | |
| No answer | 14 | 2,9 | 2,9 |
| High importance | 328 | 67,1 | 69,9 |
| Medium importance | 89 | 18,2 | 88,1 |
| No reforms in the last five years | 38 | 7,8 | 95,9 |
| Low importance | 20 | 4,1 | 100,0 |
| Total | 489 | 100,0 | |

Source: calculated by the author

Among the 489 respondents, 51.3% indicate that the reforms in the education sector have had a high impact on the governance and autonomy of educational institutions, 26% assess this impact as a medium, while 6.1% state that the reforms are not significant for the governance and autonomy of higher education institutions. At the same time, the survey data are limited and do not contain information on the impact of reforms on quality management in higher education institutions.

67.1% of respondents consider reforms in the area of quality assurance very important, and 18.2% assess the reforms as necessary to ensure the quality of education in higher education institutions at an average level. Only 4.1% indicate that changes are not important for improving educational services.

The survey results show that 74% of HEIs, according to respondents, provide opportunities for student participation in the institute's management, particularly in quality assurance (Figure 2).
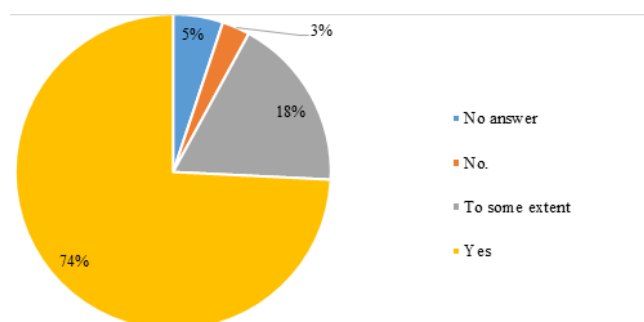


**Figure 2. Distribution of HEI respondents' answers on student participation in HEI governance, namely in quality assurance (e.g. through inspections)**

Source: calculated by the author

According to the respondents, in 2023, the most significant changes in the activities of HEIs, compared to the situation before the spread of the pandemic in 2020, are in the areas of attention to students' mental health (65.4% indicated an increase in attention), blended learning (63.4% indicated an increase in the level of blended learning in HEIs), increase in the degree of teleworking of administrative staff in 2023 (57.1%), increase in student demand for blended learning formats in 2023 (56%), increase in flexible learning offers in HEIs (51.1%), increase in the degree of online testing (49.5. (Table 5)

**Table 5. Respondents' responses to changes in 2023 in the activities of higher education institutions by areas of work compared to the situation before the COVID-19 pandemic**

| Answer option | No | Yes |
|---|---|---|
| Attention to the mental health and well-being of students | 34,6 | 65,4 |
| Blended learning | 36,6 | 63,4 |
| Remote work of administrative staff | 42,9 | 57,1 |
| Student demand for blended learning | 44,0 | 56,0 |
| Offering flexible training | 48,9 | 51,1 |
| Conducting tests and exams online | 50,5 | 49,5 |
| Institutional preparedness for emergencies and crisis management | 52,8 | 47,2 |
| Attention to the mental health and well-being of staff | 53,4 | 46,6 |
| Remote work for teachers | 53,4 | 46,6 |
| Hybrid (leaving the choice for students to attend classes online or in person) | 55,2 | 44,8 |
| Offer of online training | 55,8 | 44,2 |
| Virtual exchange / virtual mobility | 59,5 | 40,5 |
| Ensuring joint training with other universities | 64,2 | 35,8 |
| Teacher demand for blended learning | 65,6 | 34,4 |
| Insufficient academic preparation of secondary school students for university admission | 71,2 | 28,8 |

Source: calculated by the author

At the same time, 47.2% of respondents expressed the opinion that higher education institutions' level of institutional preparedness for emergencies and crisis management will increase in 2023 compared to 2020. Instead, 52.8% of respondents believe there have been no changes in the degree of institutional preparedness for emergencies and crisis management.

According to a survey conducted in Germany, HEIs have reacted very calmly to the spread of the pandemic and the corresponding restrictions. In the summer of 2020, about half of the HEIs switched to a mixed model of virtual and classroom learning, while the other half switched to fully online learning. More than 90% of HEIs provided support to students who were abroad (e.g., financial aid, return arrangements) (Kercher & Westfeld, 2020).

Seven out of ten German HEIs held online events to welcome students, and about half increased their online marketing activities. More than 80% of German HEIs responded to the coronavirus crisis by changing the application and selection procedures for international applicants. Almost two-thirds of the institutions extended the deadlines for submitting documents. Every second institution has the option of online application (Kercher & Westfeld, 2020).

In the context of the war in Ukraine, universities in Europe have responded in various ways to support students and academic staff. The most common actions taken by HEIs are the admission of students from Ukraine (60.5%), special financial conditions for students from Ukraine (reduced fees, aid) (47.6%), and the admission of teachers from Ukraine (40.7%) (Table 6).

Less common responses include expanding existing partnerships with Ukrainian institutions (29%), establishing new partnerships with Ukrainian HEIs (28.6%), offering online learning for Ukrainian students (14.3%), sharing digital resources with Ukrainian HEIs in the framework of cooperation (6.7%), and providing distance scholarships for Ukrainian teachers (5.7%). 14.3% of respondents indicated that their HEI offered no support measures.

## DISCUSSION

In general, despite the existence of general strategies for the development of higher education institutions, their action plans are changing mainly under the influence of external forces. In particular, the digitalisation processes and the spread of the coronavirus pandemic in 2020 had the most significant impact on the strategies of universities in different countries and their areas of activity. After the pandemic ended, the coronavirus crisis also affected educational processes, leading to a significant increase in attention to students' mental health, the spread of blended learning due to increased demand for it, teleworking by administrative staff, and HEIs' proposals for flexible learning. At the post-crisis stage, in 2023, the level of institutional preparedness of HEIs in Europe for various emergencies and crisis management increased.

The expansion of cooperation, competition with other institutions, sustainable development goals, economic growth, openness and accessibility of science are also important factors influencing the overall strategies of universities in Europe. Less important factors include the ranking of higher education institutions, political development, and geopolitical changes.

In the context of the war in Ukraine, European higher education institutions implemented measures to respond to the crisis in the education sector, including the most common ones, such as the admission of students and teachers, financial support, and expansion of cooperation with Ukrainian higher education institutions. These findings correlate with those of

**Table 6. Responses of HEI respondents to the measures taken by European universities to respond to the war in Ukraine**

| Answer options | No | Yes |
|---|---|---|
| Admission of students from Ukraine | 39,5 | 60,5 |
| Special financial conditions for students from Ukraine (reduced fees, grants) | 52,4 | 47,6 |
| Acceptance of teachers from Ukraine | 59,3 | 40,7 |
| Expanding existing partnerships with Ukrainian institutions | 71,0 | 29,0 |
| New partnerships with Ukrainian universities | 71,4 | 28,6 |
| We do not have any events | 80,4 | 19,6 |
| Offer of online education to students from Ukraine | 85,7 | 14,3 |
| Shared use of digital resources with partner universities in Ukraine (digital laboratories, access to repositories of scientific publications) | 93,3 | 6,7 |
| Distance learning scholarships for teachers from Ukraine | 94,3 | 5,7 |

Source: calculated by the author

other researchers. Thus, according to Ovie (2022), the factors influencing the effectiveness of universities' response to the crisis included internal and external cooperation and forming a crisis management team. Al-Janabi et al. (2022) found that crisis management strategy is influenced by knowledge sharing and management. This measure was not widely used in European universities during the war in Ukraine.

Therefore, we can assume that the crisis affected the change in the overall development strategy and management of the quality of education. European universities have generally focused on online activities in various management areas post-crisis. This is evidenced by the growing prevalence of blended learning and its demand, teleworking by university management, online marketing of higher education institutions, and online submission of student documents during admission.

Instead, the lack of data and information on quality management at the level of higher education institutions in emergencies does not allow us to conclude the peculiarities of crisis management of institutions in Europe at different stages.

## CONCLUSION

International experience in managing the quality of education in crises, in particular at the stage of response and after the crisis, demonstrates the prudence and resilience of European higher education institutions to emergency situations. The focus on digitalising various management processes has enabled universities in Europe to address the challenges of the Coronavirus. Therefore, the main changes in education quality management during and after the crisis concerned managing the admission process, training, marketing of HEIs, and staff administrative work.

The study demonstrates the different strategies and measures taken by HEIs in Europe to respond to the crises caused by the coronavirus crisis and the war in Ukraine. In the first case, the coronavirus crisis affected the overall development strategies of universities. After it ended, institutional preparedness for emergencies increased in almost half of the educational institutions. While in the context of military aggression against Ukraine, European HEIs have taken separate response measures to support students and teachers from Ukraine.

The lack of data on the impact of various factors on the strategies of HEIs in Europe, particularly crisis management strategies, limits this study. The lack of survey data on the impact of national reforms on education and quality management in emergencies requires further study of universities' institutional preparedness for emergencies.

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