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The Role of European Universities in an Age of Pandemic

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Working Papers on University Reform

Working Paper 37:

The Role of European Universities in an Age of Pandemic

Edited by Amélia Veiga and Tim Seidenschnur

EUROPEAN UNIVERSITIES – CRITICAL
FUTURES

CENTRE FOR
HIGHER
EDUCATION
FUTURES

Danish School of Education, Aarhus University

December 2022

Working Papers on University Reform

Series Editor: Susan Wright

This working papers series is published by the Centre for Higher Education Futures (CHEF) at the Danish School of Education, Aarhus University. The series brings together work in progress in Denmark and among an international network of scholars involved in research on universities and higher education.

The current paper arises from a project, 'European Universities – Critical Futures', funded by the Danish Research Council. The project addressed the question: *What are the future roles of universities in creating social and regional integration in Europe, in a shifting global context?* To do this, eight working groups formed with members from across Europe, each fostering a learning community between early stage and more senior researchers, with the aims of generating new research agendas and highlighting their policy implications. These working groups covered Gender and Precarity in Academia, Alternative Conditions for Knowledge Creation, Trust Beyond Metrics, Higher Education Access for Underrepresented Groups, Changing Dynamics Between Administrators and Academics in European Universities, Refugee Access to Higher Education, and Alternative Internationalisms. In addition, research teams in eight countries formed to research the effects of the Covid19 pandemic on the future of higher education, the results of which are reported in this working paper. This pandemic study was coordinated by Amélia Veiga, University of Porto, Portugal and Tim Seidenschnur, Kassel University, Germany. Statistical information on the eight countries' higher education sectors was compiled by Krystian Szadkowski, Adam Mickiewicz University, Poland.

Other papers in this working paper series are derived from previous projects and activities:

- 'Practicing Integrity', funded by the Danish Ministry of Higher Education and Science.
- 'Universities in the Knowledge Economy' (UNIKE) an EU Marie Skłodowska-Curie ITN project, with 6 European partners and 30 associated partners in the Asia-Pacific Rim.
- 'University Reform, Globalisation and Europeanisation' (URGE), an EU Marie Skłodowska-Curie IRSES knowledge-exchange project between Aarhus University, Auckland University, New Zealand and Bristol University, UK.
- 'New Management, New Identities, Danish University Reform in and International Perspective', funded by the Danish Research Council.

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**The Role of European Universities
in an Age of Pandemic**

Edited by

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Chapter 1 Introduction

Amélia Veiga¹ and Tim Seidenschnur²

When the COVID-19 pandemic began shattering social life in 2019, this had far-ranging consequences for European higher education at the system, institutional, and individual levels. At the system level, the pandemic raised questions about higher education institutions and their role in focusing on research and science in order to overcome the pandemic from a medical, societal, and economic point of view. At the same time, higher education came under pressure at the system level when the need to establish relationships between the public and private health sectors to manage the effects of the pandemic. At the institution level, higher education institutions had to react quickly and effectively to respond to the needs raised by the effects of the pandemic. COVID-19 pandemic, at an unprecedented scale, has been driving higher education institutions across the world to react by quickly changing their teaching online. The crisis triggered the use of online tuition and guaranteed safety as far as possible for their internal stakeholders. This represents an unknown situation with obstacles and challenging tasks for the governance and management of higher education institutions.

At the individual level, academics, researchers, students and non-academic staff had to balance private and professional lives in completely new circumstances. The pandemic challenged academic work and life for all different kinds of stakeholders in higher education. From this point of view, the pandemic can clearly be regarded as a critical incident for society's higher education in terms of a complex situation which requires new solutions, open spaces of opportunity and change but also a high risk of failure (Butterfield et al. 2005, Flanagan 1954). Critical incidents also introduce new visions of how stakeholders of the field imagine the future of European higher education (Géring et al. 2018).

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The main objectives of the exploratory project *The role of European universities in an Age of Pandemic* were (i) to analyse the effects of the pandemic at the system and institutional levels and (ii) to understand how perceptions and reactions dealing with the crisis affecting education, research and engagement with the society induces visions about the future. In doing so, our research aims to identify how COVID-19 changes higher education systems and institutions by also taking pre-existing conditions into consideration. We, therefore, analyse how the pandemic and the responses in the field of higher education differ between countries according to different framing conditions. To reach this goal, our study presents findings from 8 participating countries – England, Denmark, France, Finland, Germany, Hungary, Ireland, and Portugal. There is also a parallel study of the effect of the pandemic on higher education in Asian countries, based on the same methodology and research instrument.

The result of this project is intended to clarify how political, economic, technological, social structural factors are self-reinforcing serving to legitimate and justify policy measures to mitigate the impact of COVID-19. Overall, we argue that reactions of higher education institutions often stem from structural conditions that are self-reinforcing. They do at least partially serve as the justification of policy measures to mitigate the impact of COVID-19.

The responsiveness to a critical incident stemming from the pandemic might be exacerbating pre-existing conditions such as deeply entrenched social and economic inequalities, effects of Brexit on higher education, economic instability in major European countries, widening socio-economic gaps between member states of the European Union, population movements within and into the EU, and challenges raised by illiberal democracy trends. According to Ball (2004), a distinction can be made between first and second-order effects. The first-order effects refer to changes in structures and processes introduced by the pandemic with an impact on institutional routines and procedures, while second-order effects relate to broader changes in patterns of social justice and social and educational inequalities induced by the pandemic. Broader political, economic, and social factors conditions higher education systems and institutions and when the pandemic reached society, Europe was already facing structural problems (see also Wright 2020). Having this in mind, it is reasonable to assume that the reactions to the pandemic included, on the one hand, *ad hoc* reactions to new problems,

but, on the other hand, these reactions to deal with the crisis have also been developed based on perceptions and discourses resulting from the lived experiences induced by pre-existing conditions. For instance, the deeply entrenched social and economic inequalities question universities' roles in European social and political integration (1) (UNESCO 2015; Wende 2017). Additionally, nationalism and extremism put internal stakeholders under pressure and challenged the consolidation of the European Education Area and the European Research Area aiming to build areas in which knowledge, technology, students, researchers, and academics circulate freely.

Nevertheless, even if the reactions of higher education institutions may stem from self-reinforcing structural conditions, they do at least partially serve as the legitimation and justification of policy measures to mitigate the impact of COVID-19. Early sociological research on the effects of the pandemic on European societies demonstrates this simultaneousness of being responsive to a critical incident and to pre-existing developments. In line with this, responses to the crisis may be interpreted to have a European and national character, partially a European and partially a national character (Bergan et al. 2021; Grasso et al. 2021).

1.1 Approaching the field of higher education during the pandemic

Under the European Universities – Critical Futures framework, the pandemic emerged as a topic of research given the lived experiences affecting higher education associated with COVID-19 lockdowns. The pandemic shattered social and economic life across the world. The effects of the pandemic hit the academic field in many ways, for instance, through the financial stringency influenced by a quasi-global recession and economic decline, the changing patterns of internationalisation; the recruitment of students and participation in global research networks; and the shifts from face-to-face teaching and learning and research dissemination activities to online and virtual activities. This raises questions about the extent to which the policy measures are worsening or improving the pre-existing problems and crises. How will the effects of the pandemic contribute to entrenching inequality and social exclusion or prompt transformative action? How do these effects trigger competition or lead to intensified cooperation and solidarity? What

are the lessons to be learned in managing the crisis? What are the visions for the future of higher education? What changes affected structures and processes and impacted institutional routines and procedures? What are the effects of broader changes on social justice patterns and social and educational inequalities?

The research team members from all the involved countries developed an incremental research design approach to answer these questions. The development of the research instruments is based on a process in which the researchers from the participating countries identified and reported in the 2nd semester of 2020 the most present and challenging topics as bullet points in their countries and higher education institutions. Identifying these bullet points supported the development of the interview guidelines (see Appendix I). Simultaneously, it endorsed an authentic and contextualised assessment of three overarching issues:

1. The sustainability of higher education systems
2. The purposes of higher education institutions in society
3. The changes affecting academic work during the pandemic

1.2 Identifying relevant topics for analysing the effects of the pandemic on higher education

When we planned our comparative study based on pre-existing conditions, we decided to do a preliminary analysis of relevant topics based on the three issues. Each country contributed to the guidelines' design in bullet points listing relevant topics under the issues. Additionally, we use two online meetings in order to discuss the resulting topics and bring them in line with the design of our research instrument. This chapter presents the topics we considered relevant for empirical research under the three overarching issues.

Issue 1: The sustainability of higher education systems

The sustainability of higher education systems refers to the composition of the higher education sector and the survival of higher education institutions in times of the COVID-19 pandemic. In the bullet points, we identified not only a financial crisis but also other issues and concerns regarding sustainability. As we discussed earlier, we think it is necessary to consider the pre-existing conditions to analyse how sustainability issues are perceived in different countries. The analysis of the bullet points demonstrated that sustainability is powerfully articulated in relation to the following topics:

European and national funding base systems, including the (re)definition of research-funding priorities as a consequence of economic decline for the universities raising concerns on researching and engaging in public debate and political discussions.

(Inter)nationalisation, including questions of tensions between national and international roles of higher education, international (im)mobility, national politics, potential strengthening of neo-nationalist politics, and international cooperation.

Increasing influence of digital governance perspectives emerging in tension with managerial perspectives of governance, raising questions about the role of top-down decision-making versus other forms of individual and collective action that may emerge in the wake of the pandemic. Does the university own and control the data generated, how will it be used and marketed?

Changing national educational policy frameworks and the *definition of governmental and institutional priorities* to cope with investments in college buildings that impinge on the room for manoeuvre of higher education institutions or the *fragmentation of decision-making (for instance, through regional governments)* and the *development of different strategies* by higher education institutions driven by competition and performance, (re)definition of national priorities heightening the *relevance of health sciences during the pandemic to the detriment of social sciences* with consequences for the attribution of the relevance of different branches of science that do not necessarily share research agendas.

Increasing precariousness of early-career researchers with particular emphasis on postdoc positions, migrant researchers, and exploitation of academic staff.

Inequalities in the sector focusing on discrepancies between mass universities and smaller higher education institutions underlying the stratification trends

Issue 2: The purposes of higher education institutions in society

From the perspective of how society discussed the role of universities during the pandemic, different concerns became visible under the bullet points we received from the researchers in this study. Some challenged a positive vision of the role of higher education emerging during the pandemic around the contribution of the research to decision-making processes related to COVID-19 and the provision of expert advice to build public opinion. The extent to which the roles of higher education disrupt a positive perception of higher education in the future is open-ended.

The need for higher education to respond to the potentially changed demand for labour is articulated with employability framed by disciplinary specificities.

The extent to which *the reconfiguration of academic work* (identity-crisis of teachers), places, times and ways of working, basic tasks of higher education, the role of higher education in the time of societal turmoil.

The impact of digitalisation endangering the teachers' social role raises concerns about the support given to the students.

Issue 3: How did academic work change during the pandemic

This issue concerns the way members of higher education institutions see the development of their own field and work during the pandemic. How it has been struck by the pandemic, how the reactions changed academic life and work, and whether these changes are considered to stay or not are questions we would like to address under this issue.

Distance and online (doctoral, master) education, digitalisation as management strategies raising questions regarding the installed capacity of higher education institutions and the state of readiness in terms of digital competencies of students and academics.

Data generated by using zoom and other platforms raises concerns regarding the purposes, who owns the data and who has harvested it and how it will be used to transform higher education in future.

Mobility tied together with *internationalisation* emerged as values in academia and concerns in how higher education institutions aim to see themselves in the future .

University without walls versus the blurring of the campi's physical borders is a concern in terms of the cultural and socialisation role of higher education.

1.3 The sampling of the study

To discuss our sampling, it is essential to keep the interest of our research in mind. Presenting it in a condensed way, our research aims to investigate the pandemic's effects on the higher education system in different European countries, to analyse how changes in the systems occurred, and how visions of the future are induced by the new situation. Thereby, our study further aims to analyse how these changes relate to pre-existing conditions or to the new challenges it takes. And our study takes the organisational, institutional, and systemic levels into account, which means that even if different national systems are the subject of our comparison, we further aim to identify differences within the national system (Kosmützky 2015). To reach these aims, we defined a sampling strategy based on qualitative research methods that nevertheless allows us to compare findings from 8 participating countries (England, Denmark, France, Finland, Germany, Hungary, Ireland, and Portugal).

Comparing pre-existing conditions affecting higher education institutions around Europe during the pandemic means comparing organisations struck by the same external crisis, the COVID-19 19 pandemic. Of course, the crisis did not hit every system to the same extent and not at the same time. But even if there are slightly different times at which the numbers of infections are raised in each country, the challenges for higher education institutions responsible for research, education, and knowledge transfer have been comparable, considering the pre-existing conditions. However, national politics and how governments reacted to the pandemic differed.

At the beginning of the study, we, therefore, gathered knowledge of institutional and organisational dynamics and political measures in each system in order to receive an interpretative understanding of the ‘whys’ and ‘hows’ (Berger and Luckmann 1967; Corbin and Strauss 2015; Gioia, Corley, and Hamilton 2012) of the processes occurring in the different countries. From this information, we designed a timeline of the events happening during the pandemic in the countries included in the study (presented in each case). We also collected statistical information about the different higher education systems (which will also be presented in each case) since the size and composure of each system can be important for the changes which occurred during the crisis.

The countries represented in the study are not purposeful samples in the way that Seawright and Gerring (2008) propose to design for scientific comparisons. This is mainly due to the circumstances under which the project has been conducted. We started the study within an existing research network (European Universities – Critical Futures) that could provide us funding for meetings (which could not be conducted in person during the pandemic), but the participating researchers did not receive any personal funding. The challenges during the pandemic have also requested time from the participating researchers, and the countries in which data has been collected finally ended up as a project team of researchers who were willing and have somehow been able to spend the time necessary to conduct the research (we want to use this opportunity to thank all the participating colleagues for their efforts to make the project a success). Finally, we ended up with 8 participating countries: England, Denmark, France, Finland, Germany, Hungary, Ireland, and Portugal. The sample includes the most significant European countries in terms of population, one Southern European country, one country representing East Europe, and two countries representing the Scandinavian part of Europe. We, therefore, think that our sampling nevertheless provides examples that could be regarded as representative of different European regions, even though we admit that significant differences between national systems exist within these regions.

Concerning the interviews, we followed a qualitative approach based on semi-structured interviews. Semi-structured interviews allow us to combine narrative episodes that may hint at unexpected but highly relevant issues in each country with structured episodes that contribute to the comparability of the study by generating answers to the same questions in the different countries. Given our research topic, we proposed each country's team

conduct interviews on the national, and institutional levels. This includes decision-makers from the ministries, organisational leadership, and further members of academic organisations (deans, professors, researchers). We recommended that each country team studies two higher education institutions chosen from different locations in their higher education system (e.g. an elite research university and a polytechnic or university college focused on professional or vocational training). On the institutional level, we follow Whetten (2009) and propose an approach that includes both top-down (rector and deans) and bottom-up (lecturers, students and the support staff who have been crucial in dealing with the pandemic and handling the changes). Consequently, we aim to take a vertical slice through each higher education institution by having interview partners from different levels. The interview guidelines (see Appendix 1) included questions regarding national and institutional changes in policy and funding, internationalisation, differences within the sector and inequalities in the sector (issue 1); science, education, labour market, and relations with the society (issue 2); distance and online education; work of academics and support staff, the duty of care, and governance and decision making (issue 3).

The collection of relevant data reflects the characteristics of each national higher education system. At least two higher education institutions were selected for each national case study. National research teams undertook at least 13 interviews per country (in total 130), which enabled the project's objectives. The interviewees included national leaders at the system level and institutional actors at the institutional level, including institutional leadership, middle management, academics from different scientific fields, support staff and students. Additionally, some of the country teams collected further data, for instance, different types of document analysis such as Emails or press releases.

The eight national reports demonstrated that the effects of the pandemic hit the academic field in many ways:

- (i) through the financial stringency influenced by a quasi-global recession and economic decline;
- (ii) the changing patterns of (de)internationalisation;
- (iii) the recruitment of students and participation in global research networks;
- (iv) the precariat structure of academic work;

- (iv) the shifts from face-to-face teaching and learning, research and engagement with society to online and virtual activities;
- (v) curriculum and pedagogical management and professional academic development focusing on the pedagogical turn;
- (vi) the public understanding of higher education;
- (vii) the meanings of cooperation within the dynamics of democratic societies.

The reports also reveal that crisis management at the national and institutional levels can help to draw lessons for collective processes of learning stemming from the problematisation of three overarching issues. Public funding stringency measures affecting the education sector and the changing conditions of knowledge production have been reconfiguring academic work, and the crisis enacted by the pandemic is a crisis within other crises. The results of our study illustrate how pre-existing conditions exacerbated social inequalities, the reconfiguration of academic, support staff, and students' work, and changes in professional values while addressing the need to tackle new challenges. The reports showed considerations about which changes in academic work, organisational processes, and the role of universities in society are more likely to stay or to be turned back. Under a pragmatist approach driving the response to the challenges raised by the pandemic, it is difficult to envisage which changes will endure. However, the role of digitalisation on both working conditions of academics, students and support staff and on the modes of teaching and learning is opening the way to changes in the sustainability of higher education systems, the purposes of higher education institutions in society and in the academic work. On the assumption that there is a benefit to collective learning processes, the joint evaluation of policy measures to mitigate the impact of COVID-19 brings forward the need to establish new dialogues between researchers, leaders, and policy practitioners. These findings will be presented first for each country's case, and in the Conclusion and Summary, we will discuss the findings from a comparative perspective and point the way forward.

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Chapter 2 Denmark

Rasmus Harsbo, Mille Idehen, and Susan Wright³

2.1 Overview of research conducted

2.1.1 List of interviews

National system-wide actors	Organisation	Interviewee
5 interviews:	Ministry of Higher Education and Science	Civil servant
	Academic union (Dansk Magisterforening)	Member of national union's university committee
	Danish Rectors' Conference (DU)	Members of education committee and directors' committee
	University College Rectors' Conference (Danmarks Professionshøjskoler DP)	Member of Rector's committee
	Case 1	Case 2
Type of institution (e.g. large/small, public/private, research/vocational)	University (Academic education) Public, medium sized (8,000 students)	University College (Professional education) Public, large (20.000 students)
Overall number of interviews	8	10
Top leadership (number/positions)	Rector Director	Rector Head of Administration
Middle leadership (number/positions)	2 Heads of department, who were also lecturers*	3 Deans
Administrative staff (number/positions)	E-learning consultant (educational development)	Director of Resources
Academics (number/positions)	2 lecturers* 2 PhD candidates	1 lecturer 1 study counsellor
Students (individuals or group interviews?) (number of interviews)	1 student	2 students

³ All at Danish School of Education, Aarhus University, Denmark

Other data	Danish national policies, Ministry reports, press releases, media reports. University and university college documents, reports, newspaper and email circulars.	
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2.1.2 About the case studies

Case study 1

Universities are the only higher education institutions in Denmark able to offer three levels of degrees: bachelor, masters and PhD. The sector is small (8 universities) ranging from older, multi-faculty universities located in city centres to newer (1970s) universities built on green sites. The latter emphasise the importance of being ‘campus universities’ with interaction between faculty and students. Often they have adopted a ‘reform’ pedagogy that focuses on group work and problem-based or student-led learning. The case study was one of these universities.

Case study 2

The University Colleges in Denmark offer primarily professional bachelor degrees and they educate candidates with skills directly applicable to the immediate needs of the job market. University Colleges also offer continuing education - diploma and academy programmes - for people with professional bachelor degrees, but they offer no programmes at master or doctoral level. Research is carried out on central societal problems related to one or more of the professions of the University Colleges.

The University College chosen for the case study offers 21 different professional bachelor degree programmes. The 4 largest programmes are for teachers, pedagogues,⁴ nurses and social workers. Smaller professions include physiotherapist, radiographer, lab-technician, disaster-and risk-manager, nutritionist, and nature- and culture-guide.

⁴ The Danish term pedagogue refers to professionals who have completed a 3½-year academic course on how to support people of all ages in their social and cultural development, interactions and social inclusion. Pedagogues work in kindergartens and nurseries, in after-school and youth clubs, with at-risk families, and in retirement homes, prisons and orphanages. Danish pedagogues are a separate profession from teachers. The Danish is far distant from the English meaning of a strict, boring and pedantic teacher.

The University College is a 'self-governing institution' (see 2.3 below) with a board consisting of 15 members and a leadership consisting of a rector, a resource manager, a director and 3 deans of different departments. They operate from several physical locations within the city and one large location and a few small locations outside of the city. Their role is to provide the professional workforce needed by the municipality and region in the public sector fields of primarily healthcare, pedagogy, child education and social work.

2.2 Country profile

2.2.1 Basic data about Denmark

Population (2020)	5,822,763
Unemployment (2019)	5.0%
GDP per capita in PPS (2019)	129
COVID-19 caused GDP drop in Q2 2020	-6.9%
Gini (2018)	27.8
Human Development Index (2019)	0,930 (11)
Government form	Unitary parliamentary constitutional monarchy
Political orientation of the current government	Social democracy (Social Democrats)

2.2.2 Characteristics of Danish Higher Education system

Population of students (2017)	312,400
Tertiary education attainment (2019)	Total 49% of which women (56.6%) outnumber men (41.8%)
Student-academic staff ratio in tertiary education (2017)	11.2
Number of higher education institutions (2016)	37. i.e. 8 universities; 7 university colleges; 4 music academies, 3 architecture schools, 5 business academies, 10 specialist schools.
Public spending on tertiary education as % of GDP (2015)	2019 public expenditure on higher education was 37,733 million DKK (Statistics Denmark 2022) 2019 GDP was 2,314,508 million DKK
Fees	Higher education is free for nationals, permanent residents and students from the EU/EEA and Switzerland. Tuition fee for all others is €6,000-16,000 (DKK 45,000-120,000) p. a.

Governance	See 2.3 below
International students (% of total) (2018)	10.7
Main international student origin countries	Europe excluding Nordics 45%, Asia 18%, US & Canada 15%, Nordics 8%, Australia & NZ 7%, Africa 3%, Latin America/Caribbean 3%.(Statista 2022)
Number of Institutions in ARWU 2020 Top 500	5

2.2.3 Governance of Danish Universities

In 2003, the Danish Liberal/Conservative coalition government, with the support of nearly all the other political parties, passed a University Law, which substantially changed the status, role, governance and management of universities (Danish Parliament 2003, Wright and Ørberg 2015). University Colleges are governed through a separate law, but they are also ‘self-owning’ institutions governed by a board.

The university reform aimed to make them into reliable negotiating partners for government and industry and restore politicians’ trust in universities. Universities’ funding was increased so that they could fulfil the role of supplying the knowledge for innovation and the highly skilled labour that industry needed to make Denmark competitive in the global knowledge economy. There was a linked strategy to attract international universities and industries as research partners and bring high performing international students to Denmark. By these means, Denmark would retain its position as ‘one of the richest countries in the world’ (Globalisation Council 2006: 4).

At the core of the reforms was a change in the status of universities from being autonomous in the sense of ‘self-steering’ (selvstyrende) to autonomous in the sense of ‘self-owning’ (selvejende) (Danish Parliament 2003 Kapitel 1 §1 Stk 2). ‘Self-ownership’ gave universities the status of a ‘legal person’ that can enter into contracts. Contracts were to be the vehicle through which universities would fulfil their new obligation to exchange knowledge with ‘surrounding society’ (in addition to their established missions of research and education). Universities were envisaged as surrounded by myriad economic, political, public and social organisations, including the Ministry of Higher Education and Science itself, that were all entitled to make demands on their research and

education. The university was responsible for exercising its own agency in negotiating these demands for knowledge exchange whilst fulfilling its legal obligations to protect its own research freedom and ethics.

A second way that universities were to be reliable contractual partners was through changes in their governance and management. Previously, in ‘self-steering’ (selvstyrende) universities, academics, administrative staff and students elected decision-making bodies for their institute, faculty and university, and elected the institute leader, dean and rector as their executives. These elected bodies and their elected leaders were abolished. Instead, a ‘self-owning’ (selvejende) institution had a 9-person governing board, with a majority of members from outside the world of universities. The governing board appointed the rector, who in turn would appoint the deans, who appointed the heads of department (Parliament 2003a Chapter 3). Each leader was accountable upwards to the leader above, and not downwards to academics, staff or students. Although the law obliged leaders to involve students and academic, technical and administrative staff in ‘material decisions’ (Parliament 2011 Part 3 10:6), it has never been clear how. This top-down line management was meant to make their institutions quickly responsive to changes in government policy.

A third important mechanism in the steering assemblage was output-based funding. This kept universities’ liquid funds very low. Their new status as ‘self-owning universities’ meant they owned the responsibility to remain solvent, but (unless they indisputably already owned any assets) they were not allowed to take over the ownership of buildings, land or other assets. This meant that they could not raise money through mortgages or other means or generate funds for independent action. As a result, government could steer university priorities through detailed changes to output funding, and this made universities quick to respond to changes in government priorities (Ørberg and Wright 2020: 141-4).

On the other hand, the law gave the newly appointed university leaders more budgetary freedom. They could use unspent funds to build up equity so as to buffer the tight dependence on state steering. However, successive firing rounds showed this equity was inadequate – or the leadership was unwilling to deploy it – to challenge the government’s steering through control of liquidity and funding incentives. At the same time, the law introduced a new system of accrual accounting, which for the first time gave the

university's leadership an overall picture of the university's finances and a standardised calculation of profitability of each output. The new understanding of university finances facilitated by accrual accounting both enhanced the university leaders' capacity for financial planning through greater control of money flows and enabled them to align their internal steering with the government's framework of funding and incentives (Aagaard 2012: 407).

Finally, a strengthened system of government inspection was intended not just to handle any complaints, but to be formative. Through regular meetings, the Ministry of Higher Education and Science would be able to tutor the university leaders in how to exercise their new capacities and freedoms. Longitudinal studies have shown that relations between politicians and ministry officials and university leaders have changed over time. Initially the ministry provided policy frameworks (e.g. for internationalisation, and for the university's organisational development) within which the universities' appointed leaders enacted their own vision for positioning their university in Denmark and internationally. At this initial stage there was a continual negotiation between policy makers and university leaders about how to articulate the governance and steering tools according to their various visions of the university's strategic and transformative capacity (Ørberg and Wright 2020). Over time, however, the political and central administrative control over university leaders has intensified, so that now sudden shifts in government policy are announced and expected to be speedily implemented by the top-down hierarchy of leaders in what is referred to as 'commando-way steering' (Wright 2021).

2.2.4 The Pandemic in Denmark 2020-21 – overview and timeline

The national lockdown and closing of borders came two weeks after the first case of COVID-19 was reported in Denmark. At both the case-study university and university college, the lockdown had been anticipated, but its immediacy and scope came as a surprise, as campus and all teaching activities were completely shut down from one day to the next. Resuming teaching at a distance through digital support on the following Monday, 16 March, was a completely new experience for most faculty, teaching staff and students. Teaching at a distance became the rule in the spring semester 2020. Gradual reopening started towards the end of the semester. The autumn semester 2020 started out

as fairly normal but by the end of December 2020, in the second wave of COVID-19, new cases peaked at 4500 per day and daily deaths rose to 30, twice as many as in the first wave. In spring 2021, higher education institutions were closed until the end of the semester. Other public services (hospitals, police, kindergartens) were reopened before education institutions, and as the timeline indicates, regulations were changing frequently and at short intervals. Public trust in vaccination has been relatively high: 76.7% of the population had received two doses by December 2021 and 16.7% had received the booster. The status of Covid as a ‘critical threat to society’ was lifted in September 2021, but the threat status was re-imposed two months later.

2020	27 February	First case of Covid-19 in Denmark
	11 March	National lockdown University: E-learning consultant visiting departments to introduce Teams, most staff had no prior experience with Teams.
	12 March	University closed. Crisis committee starts preparations. No teaching. University College (UC) closed. Crisis management team meets and adds representatives of teaching staff and students
	13 March	Borders closed
	16 March	University and university college start online teaching. University teaching session is nearly over – students doing project work UC Crisis management team meeting 2-3 times per week
	30 March	At UC, 80% of all lectures transformed to digital/on-line
	18. April	‘White tents’ for corona testing set up nationally.
	20 April	First phase of re-opening is announced nationally. Free testing. Very limited international travel.
	24 April	National organization for the 7 UCs debates which activities to prioritize for opening up before 10 May. Request to open up simulation-rooms, laboratories, libraries and activities for vulnerable students is sent to the Ministry of Higher Education and Science.
	27 April	UC’s library reopens with limited access
	18 May	Second phase of reopening is announced nationally. UC introduces a system for dean and rector to permit specific teaching activities on campus that require labs and simulation rooms. Most of the semester’s exams to be on-line.
	29 May	UC’s Bachelor exams are on campus. Vulnerable students can choose on-line exams.

	8 June	UC's Autumn semester plan – within Covid restrictions, teaching facilities can accommodate 50-85% of normal capacity.
	10 August	Ministry announces that UCs can open with regular physical activities on campus. Assemblies limited to 100 people
	16 September	Assemblies limited to 50 persons. UC changes all larger activities to on-line.
	29 October	Masks become mandatory inside.
	December	Restrictions re-introduced. First vaccines – for elderly UCs go into a second lock-down, all lectures online with very few exceptions (lab- and simulation-rooms).
2021	3 January	University able to hold on-campus exams
	5 January	National risk returns to level 5 – more restrictions UC: All bachelor exams and study activity done on-line, except exams and physical training that cannot be done on-line and is crucial to the programme and the student's progression.
	8 February	Gradual reopening of public institutions. Higher education still closed.
	6 April	UC: 50% physical attendance allowed for final-semester students 20% physical attendance for remaining students. First-semester students prioritized.
	5 May	30% physical attendance allowed for all students.
	21 May	100% physical attendance allowed for all students.
	10 Sept	Covid-19 declared no longer a 'critical threat to society'
	11 November	Covid-19 again classified as 'critical threat to society'. Reintroduction of corona-pass.

2.3 Sustainability of higher education systems

2.3.1 Policy and funding priorities

National priorities

After a period of increased budgets, in 2015 parliament decided to decrease university budgets by 2% every year. The policy was rolled back in 2020, but by then it had already had enormous consequences as a 're-profiling' of universities had involved cuts in courses and staff. In 2017, a further national policy focused on de-internationalising higher education and that has continued through to the present. During the pandemic, a new national strategy for 'balancing' between Denmark's four main cities and the more

marginalised hinterlands was devised. This calls for major cuts in student places in the cities and a ‘relocating’ of higher education to the countryside. These policies are discussed below.

De-internationalization. Following the university reform in 2003, further and higher education had actively responded to the Liberal Party-led coalition government’s internationalisation strategy and its call to attract ‘the best’ researchers and students from around the world. In 2017 the Liberal Party-led coalition government announced a volte-face and there have been three phases of cuts in English-medium education. First, vocational education colleges were required to cut 1,700 places in English-medium education. Second, the government instructed universities to cut 1,200 places on English-medium courses (Wright 2021). This aimed to reduce the number of EU students eligible for Danish student grants (SU), but fee-paying international students were also excluded by the cuts in English-medium places and courses. Third, in June 2021, the Social Democrat government continued with the de-internationalisation of Danish further and higher education by requiring that by summer 2022, 1,539 English-medium places in university colleges and a further 2,290 in vocational colleges must either close or be converted to Danish-medium education. The UC in this study only had one international programme, which was already in the process of closure for other reasons. Other UCs had many international programmes and those with business programmes are especially affected. The policy cut approximately 80 percent of current international programmes.

Relocation (udflytning). During the pandemic, the majority of political parties in Parliament reached a consensus to relocate student places in higher education from the urban centres as an instrument for ‘re-balancing’ population and opportunities. Both the civil servant from the Ministry of Higher Education and Science and the member of the academic union’s national committee said that this policy had nothing to do with the pandemic. But the reform was announced in May 2021 when, as one interviewee said, higher education institutions were ‘just trying to catch our breath’ and manage continuing uncertainties during the easing of the lockdown. The reform requires each university to reduce 5-10% of its student capacity either through cuts or by moving provision out to smaller towns by 2030. The political agreement on relocation for the UC sector had two parts. First, the provision of the four main programmes for welfare state professions (teacher, nurse, pedagogue and social worker) had to achieve close to 40% in cities and

60% in hinterlands, which entailed a vast relocation due to the size of the programmes. Second, the rest of the university colleges' programmes in the large cities had to be reduced by 10 percent. However, if a university college was already reducing its students by 20% under the de-internationalisation policy, they did not have to reduce a further 10% under the udflytning policy. Universities and university colleges were required to submit their plans for cuts and/or relocation to the Ministry of Higher Education and Science within three months (by 12 January 2022).

There was awareness that politicians were worried that the rate of migration of young people to the main cities threatened the viability of '2nd order' towns and that Social Democrats had been developing ideas for gaining electoral support outside of their main base in the cities, especially through vocational education and meeting the need for qualified staff in health services and schools. The civil servant from the Ministry of Higher Education and Science said that political discussions had been going for some time and it should not have come as a surprise to the higher education sector. However, the timing, as one leader said, 'came as a bolt from the blue' just as the pandemic lockdown was easing. The way the announcement was made, without involving the higher education sector in prior discussion, also came as a shock in comparison to the close communication and mutual exchange of information that marked the relation with the Ministry of Higher Education and Science during the lockdown. The ministry civil servant explained that the decision was 'pure politics': the government would want very little discussion about a policy proposal before it was announced. After the announcement, there could be discussion about how higher education institutions are to achieve the political objectives, followed by political negotiations over the higher education institutions' plans. There was a widespread understanding that the concentration of higher education in the main cities was a problem, but there was an equally widespread view that the relocation proposal was not the best way of achieving the government's objectives. Yet there was no room for discussions of alternative approaches. The member of the academic union agreed with the need but thought the politicians were not using the right methods to achieve their aim. The union had contacted politicians but 'we soon found out it was not possible to change their attitude or approach - but we tried'. There was consensus among Danish university rectors that the reform in its current shape was extremely detrimental to a research-based academic community.

Among academics the aversion towards the reform is extremely strong. As one interviewee put it:

The consequences of the reform will be bigger than those of the pandemic in the long run.

University colleges had more limited options for relocating their courses as they are required to provide the professional labour needs of their own region. The four main programmes were already highly distributed geographically, with courses for teachers in 20 places, for nurses in 23 places, pedagogues in 23 places and social workers in 13 places. There were 12 more courses outside main cities than 20 years ago and in that period, the relative number of students outside main cities had also gone up. UCs were already experiencing difficulty in recruiting students for the four welfare professions and enrolment had fallen by 14% between 2019 and 2022 (UFM 2022) with continued problems in filling job vacancies (*Information* 2022). Making 60 percent of places in the four main welfare professions available outside the cities would only be possible if local employers offered practical work placements for students. Yet many employers were reducing such places due to lack of resources. Higher education was being made an instrument of regional development with enormous consequences for budgets.

Common to both the de-internationalisation and the decentralisation policies is the way government imposes changes. Formally, government can only require ‘self-owning’ universities to make changes by an act of Parliament, or by persuading them to implement a change voluntarily. However, higher education institutions depend heavily on government funding for teaching, which is a monthly performance payment, based only on the number of students who pass their exams (not the number taught). Government has tight control of higher education institutions’ liquidity and uses detailed changes in the teaching payments to require compliance with changing political priorities. The civil servant from the Ministry of Higher Education and Science explained that in Norway and Sweden, universities receive a basic grant and then have to argue for any additional funding for extra activities. In contrast, Danish universities are paid by performance, and the leadership decides how to allocate its revenue to activities. The civil servant thought that politicians trusted that universities play a vital role for the future of the country, but, as higher education receives a large amount of the national budget, they wanted to know

what the universities were prioritising and whether they were actually doing what was best for the country and not just best for the university itself. Although the law states that *selvejende* institutions are responsible for protecting their own independence and ethics, the ministry civil servant also pointed out that the law states that universities have to do what is good for society, and ‘who decides that if not the parliament?’ If a university does not wish to do something supported by a large majority in the parliament, then either the minister can fire the governing board or parliament can make changes to the law or to the funding mechanisms.

Whereas ‘self-owning’ universities are meant to be steered by a governing board at arms-length from government, in practice, they are treated like a tightly controlled service provider and higher education institution leaders have not managed to assert the sector’s autonomy. As one interviewee in a senior position said about the *udflytning* policy:

Interviewee: *It is very much a political agenda that has majority support throughout the spectrum of political parties, so we don’t feel we can do much about it. In the case of udflytning we don’t perceive ourselves as a ‘self-owning institution’.*
SW: *But you are a ‘self-owning institution’, aren’t you? They can’t just tell you what to do, can they?*
Interviewee: *But in the end they can. They do own us, so on the bottom line they can tell us what to do. They did not pass a law, but they could have done that, as they have a political majority behind this plan. And as a state employee, we have an obligation to adhere to the agendas of the ministry and the parliament.*
SW: *But you are not state employees, are you?*
Interviewee: *Yes, in reality we are. ...*
SW: *But we are not civil servants any more, like the people in the ministry.*
Interviewee: *Yes, in principle we are. We answer to the state as our employer. It would look very strange, if we refused to adhere to the political agreement that has been made. That is not an actual possibility. I do think this is on the edge of what the political system can tell a ‘self-owning institution’ to do.*

Institutional priorities

Case study 1

Before the pandemic, the university’s top-level priorities were to improve its pressing financial situation and restructure its masters’ programmes. The annual 2% cuts to university budgets and the state’s adjustments to teaching payments had had enormous consequences in the case-study university. The university had a relatively high dropout rate between bachelor and master levels and was penalised for courses with relatively low

employability, which resulted in smaller yields for the university's budget in terms of payments per graduated student. Students had been able to freely combine any two master's programmes offered across the university. They aimed to improve educational quality by having a smaller number of combinations that would also be more legible for employers. A reform in 2019 had heavily decreased the amount of programme combinations available to students but that had not been successful enough, and another reform process had been initiated in January 2020, just before the pandemic hit. The university's leadership decided to continue the master's reform process, despite the pandemic, with all discussions and decisions made online, as the rector explained:

Everybody engaged in [the reform process]. They all were so afraid of losing their own programme, so they got into the fight with each other. And that was another reason for not prolonging the process. Better have that fight for four months [during lockdown], and then decide, than having it spread out over ten months.

Their priorities during the pandemic were therefore crisis management and master's reform, and the other priority, solving the financial problems, was put on hold.

Case study 2

Just before the pandemic, the UC had gone through a major merger of two former UCs. The priority had been to establish a structure and a new strategy called 'Fælles om Fremragende Undervisning' (United in excellent teaching) that was relevant for both stakeholders and staff. The rector explained:

Teaching is our pulse and our primary priority; it is primarily through the teaching that we can create change. We were on a successful path. Our deans and teaching staff took the new strategy to heart surprisingly fast and expressed that they could identify themselves with it. It made sense to them.

The strategy had four focus areas for teaching:

1. Improve the student's practical skills and organisational insights
2. More and better laboratory-based learning
3. Improve the coherence and cooperation between education and internships.

4. Develop digital/didactical learning methods and increase the use of digital platforms as a supplement to the physical on-site teaching.

One of the aims of this strategy was to attract more and better applicants as lack of manpower in Denmark's public sector is an increasing problem. Not enough new nurses, teachers and pedagogues are being trained because the UCs are not receiving enough qualified applications for their programmes. They also wanted to upgrade practical, lab-based learning and the problem-solving competences of students so as to prevent a 'reality shock' when graduates joined the public sector workforce as professionals in healthcare, pedagogy and teaching. Another focus before the pandemic was how to improve student involvement in democratic processes.

The merger involved changes for staff. It focused on reducing administrative staff. The study-counselling units of the two former UCs had merged 6 months before the pandemic hit and were still in the process of developing a new unified culture. The primary concern among the teaching staff was the working conditions and how many lectures per week they were expected to deliver. Teachers felt under pressure because the time for preparing lectures had been reduced gradually over some years. When the pandemic hit in March 2020, all focus shifted to crisis management and transformation to digital learning.

The student representative in the UC's governing board how the pandemic changed the focus of the board meetings:

When the pandemic hit, it pushed the priorities in the board meetings. The other agendas did not disappear, but they were pushed into the background, because it was a crisis situation where we had to deal with finding solutions to very pressing problems. We still had debates about buildings and other priorities in the board meetings, but the pandemic took priority in the meetings, because decisions had to be made fast on how to handle it.

The Ministry of Higher Education and Science's agenda focused on securing the wellbeing of students and staff. It immediately became clear that a major challenge for the University Colleges was how to handle the internships. Most of the programmes offered by UCs involve long periods of internships, and some of these were cancelled or

postponed during the pandemic. One of their first tasks of the crisis management team was to get the approx. 200 students, who were doing internships abroad, back to Denmark.

2.3.2 Internationalisation

Case Study 1

At the university, the pandemic put internationalisation under enormous strain. First, some of the international students at the university moved back to their home countries. This was out of concern for their relatives, or to avoid social isolation in Denmark, as most students live alone in very small rooms, or because of lack of financial options. All students who are Danish citizens are eligible to receive a generous state grant, but for EU-citizens to become eligible, they need to work 10-12 hours each week. As students from other EU member countries are often employed in the service and hospitality sectors, many were unable to work during national lockdown and therefore lost access to their Danish state grant. Two sources reported that some staff and students from outside the EU were also advised by university administration and authorities not to apply for long term sick leave, whether in connection to mental or physical health, since it could result in suspension of their residence permit. The precarious conditions of international students were only exacerbated by the pandemic.

PhD students was another group experiencing considerable impacts. One research participant had planned five different research visits abroad but ended up simply visiting another Danish university:

A few months into the pandemic, as we realized we would have to live with the virus for a long time, I simply stopped working on my plans for stays abroad, since it became apparent it was not going to happen in any case. I just could not imagine how things would work out. No one could at the time, of course. It seemed to me that it would have been embarrassing, even, to write an email to a colleague abroad asking if I could visit the following autumn. They would have thought I am crazy.

In many cases data collection had to be completely restarted or heavily adjusted as a result of limited mobility.

Case Study 2

Informants from the UC management said they had never seen themselves as an international organization. They answer to the region and the municipality, and their job is primarily to train staff for the Danish welfare sector. The UC never had an international profile or strategy. They have a few international students (around 80) who come to Denmark for a semester. Some of their students also go abroad for internships. The government's policy is that there has to be a balance between the number of ingoing and outgoing international students. During the pandemic, all of the Danish students who were doing internships abroad had to come home. The crisis management team was involved, together with the foreign ministry, in 'rescue missions' to get students out of Africa, Latin America and other high-risk zones. It was safer and easier for many of the international students, who had come to Denmark for a semester, to stay enrolled during the pandemic, due to the swift transition to online teaching. So the balance between ingoing and outgoing students was disrupted, and now the institution is facing economic sanctions (through the Ministry of Higher Education and Science's reductions of teaching payments) as a result of this imbalance.

The next cohort of Danish students had to cancel their plans for internships abroad and the international internship coordinators worked overtime to find extra internship placements for them in Denmark. Even though international students had to cancel planned semesters in Denmark, some could participate on-line during the transition to almost 100% digital teaching. But it became a problem when the UC started opening up to physical attendance again and they could still not come to Denmark.

2.3.3 Differences within the sector

Through the umbrella organization Danish Universities (DU), the rectors, university directors and leaders concerned with education all held regular meetings. For example, the eight university directors aimed to align 90% of their activities to avoid confusion

among the student population in Denmark if some institutions introduced harsher restrictions than others. The director of the university recounted:

At one point we received instructions from the ministry as to how many people could be on campus at the same time, so we even came to an agreement on 'counting methods' in this respect across universities.

DU's committee on education also tried to align their crisis management, although here the focus was on differences arising from diverse pedagogical and didactic styles. For instance, the case study university's focus on group work and group exams meant it aimed to conduct on-campus exams to the extent rules and restrictions allowed, whereas other Danish universities stuck to off-campus digital exams throughout.

The university colleges also collaborated closely together and with the Ministry of Higher Education and Science. The chair of the association of UCs explained:

I was coordinating the national strategy for handling the pandemic in the UCs. I had meetings once or twice every month with the other rectors, the ministry and the minister throughout the lockdowns. I also had direct contact with key players in the ministry. ... We collected a lot of the data that the ministry needed to develop their pandemic strategies, so we played a key role in developing those national strategies and were listened to by the political system. The ministry needed the data we could provide for them, on e.g. how many students would have their internships postponed or cancelled and what that would mean to the production. We have 20,000 students training for key positions within the welfare state, so they had to take our data into consideration.

The primary difference between UCs and universities is that all of the UC programmes involve internships for students, and these are essential to the programmes. This meant that the UCs could not just do crisis management for themselves, but also had to cooperate with all their stakeholders. The rector of the university college described this as a very complex and somewhat chaotic task. They managed to do it without losing students and drop-out-rates actually decreased during Covid. *Our young students had more stamina than what we expected*, explained the rector.

One of the deans explained another unique challenge faced by the UCs:

When an education is based on learning how to relate to and interact with human beings in different types of settings such as hospital care, rehabilitation and pedagogical training of children, like almost all the education programmes that we offer in the university colleges, it is a huge challenge to transform the learning settings from physical presence and interaction to digital learning from a distance.

2.3.4 Inequalities in the sector

The member of the academic union's national committee pointed out that the effect of lockdown on academics varied greatly by age and family circumstances. For himself and his wife, in middle age with grown up children, '*it was actually a moment of peace that enabled us to focus more on what we would like to do in life and in work*'. But he was conscious that the challenges were greatest for academics in the early stages of their career, on short-term or part-time contracts:

They were running around trying to help the kids with school work and at the same time they tried to do some work, and tried to find out how to get the groceries and all that stuff. So they not only had a great workload at work but also an enormous amount of work with the kids being at home trying to solve things.

As he pointed out, there was a doubling up of inequality: '*those who lost out are those who always lose out*' and often these were women as '*the work is not always equally distributed back home*'. PhD students were especially affected if their family situation, the need to change to teaching online and an inability to fulfil the requirement to study abroad put their research behind schedule. It is unclear how delays and lost opportunities will affect their careers. The union took up with the Ministry of Higher Education and Science the need for supplementary funding for PhD students. They also explained to university management that levels of research output could be expected to drop where people were prioritising teaching and care for students, whilst they had kids running around at home.

Case Study 1

There was a consensus among research participants from the case study university concerning the disproportionate consequences for women. Under the national lockdown, when day care was completely non-existent, the responsibility of caring for children and their schooling at home fell in large part on women researchers, especially junior ones. This occurred because most single parents are women, but also because the work hours of women researchers were perceived to be more flexible in comparison to non-academic partners, resulting in them performing both housework and childcare on top of academic work. One consequence, as noted in a position paper produced by EVORA, the association of women rectors, is that women have published far fewer research articles than men during the pandemic.

Students were experiencing many challenges that emerged from the off-campus teaching. As one student explained:

Many students have had bad internet connection, and been living in tiny student rooms, where they spend all their time, both study and leisure time. So those students that could rely on support from their parents have had it the easiest. [...] In the study board we have received lots of requests for dispensations and sick leaves as a result of lock down conditions, especially concerning international students.

While generally praising the university for its professional crisis management, the student representative still had to point out that much damage had been done, and most of irreversible:

I believe we are dealing with a 'lost generation'. You can interpret the term in different ways. It applies to those of us who are graduating and, to be completely honest, have received a worse education than previous students, especially empirically minded students. But it also applies to those who enrolled in 2019 and 2020, of course, and had to start their university education under the worst conditions in recent history.

Case Study 2

The academic staff interviewed at the UC said challenges were faced by younger colleagues and teachers trying to deliver online lectures whilst taking care of young children at home. However, they did not attribute these challenges to gender or age. As one teacher said,

Especially our young, new colleagues, who do not have experience as teachers, had a very hard time. I did not perceive a gender difference. But having teaching experience gave you an advantage in terms of having something to work with. For the young, new teachers, who have just finished an academic degree and have no teaching experience, it takes a lot of effort to prepare lectures and develop didactic skills and methods. Normally you would have the chance to team up with more experienced colleagues and draw on their experience. But having to learn how to teach students for the first time, during a lockdown and total isolation from colleagues made this a really hard task.

Some of the administrative/support staff had to come to the campus to do their jobs even during lock down periods. Some of the older members had increased concerns about the risk of infection. Others worked almost entirely from home. Those who lived alone or who were mentally and/or physically vulnerable, were hit harder by having to go into isolation and working from home. The study counsellors were the group of employees who worked most extensively from home during the pandemic. Their one-to-one counselling sessions could easily be changed to on-line sessions, so they hardly came onto campus at all for 18 months.

Among the different student populations at UC, there was a correlation between their level of academic skills and their study intensity (number of weekly hours spent on studying). Programmes with the highest admission requirements (radiographer, midwifery) found study intensity increased during lockdown. In the pedagogue programme, with the lowest admission requirements, study intensity decreased.

Certain groups of students benefitted more from the online lectures than others. Some introverted students who did not join in pre-pandemic drinking parties during weekends

and were usually quiet in class, blossomed and had a lot more to say during online lectures. Others, who had a diagnosis and struggled when taught in large groups, found relief from pressures to socialize and interact in physical spaces and thrived when studying from behind a screen in their own homes. However, students in programmes where the admission requirements are low, often struggled to make the transition to online and self-structured studying. One of the teachers in the pedagogue programme explained:

Many students were not ready for this kind of learning, where they have to be much more disciplined and initiate their own learning and participation. We can see that many of our students skipped a lot of the e-learning days and are lacking knowledge because of that. Pedagogue students have typically graduated from high school with an average score between 2 and 4, whereas the teacher students have to present a score above 7 to be accepted into the programme. So, to expect the same level of skills in terms of transitioning to online, more individualized learning processes is really unfair.

Batches of students who had just started their studies in late February 2020 had not even had time to learn the names of their classmates when the first lockdown started in March, and they were sent home. One student described this experience:

I started my education here during lockdown, so we had all introductions and courses online from the beginning. It took two months before I could meet my fellow students for the first time. It was a weird experience having to write an exam paper with someone I had only met online. When I finally met my fellow students, I remember being surprised by how tall or short they were, because I had created my own images of them, and they were wrong.

In the pedagogue profession, we are very concerned with forming relations. But it was really difficult for us in the beginning to form relations, because there were not really any of those more informal situations, where you would just hang out or go for a walk and get to know someone... When you can't have informal chats or a coffee in the canteen, it is so difficult to form those bonds with people and figure out who you can work with.

Students with social and mental problems suffered especially badly during the lockdowns. Out of 6000 students on the pedagogue programme, 15% receive SPS (pedagogical support for people with special needs) and many of them had a hard time. A student from the teacher programme described the special challenges faced by new, young students living alone:

The students who lived alone were suffering the most during the lockdowns. In some cases, their study-jobs in cafés and bars were closed down too, and they just sat alone at home all the time. Some of the new students had just moved to the city for studying, and did not know anyone here. They were counting on getting a social network through studying. For them it was really hard. Sitting all alone in a student residence or a very small apartment, not socializing with anyone for days or weeks.

In study counselling, they saw an increase in students who needed help structuring their lives:

We had to develop some support for groups of students in how to structure their daily life during the lockdown. Some of our students lost that structure and self-sustainability and we could see that they were sitting in their pyjamas with uncombed hair. So, we had to help them regain that sense of structure in their life.

Unlike university students, many of the students at UCs do not have privileged parents who can invite them to move back with them or lend them a summerhouse. However, very few lacked internet facilities at home. Provision was made for those without internet to come to work in special rooms on campus. This was mostly an issue if students or teachers were concerned about losing internet contact during online exams.

2.4 The purposes of higher education institutions in society

2.4.1 Science

The member of the academic union's national committee pointed out that although people relied on ideas about culture, society and the arts during the pandemic, they focused on scientists and followed information on medical developments. So there was a doubling of interest in STEM, but not in humanities and social sciences. Unlike in some other countries, scientists were not accused of dictating about the need for lockdowns, social distancing and how people had to behave; scientists had a good name and in the media they explained their figures and spreadsheets in ways people understood. He thought there was a culture of relying on authorities in Denmark, and Sweden acted as a counter-image to Denmark and the rationality for handling the pandemic.

Case Study 1

Interviewees reported that university science gained new recognition. There had been increased television coverage of scientists during the pandemic and a wider awareness and appreciation of their research.

Case Study 2

University colleges train the professional staff that played crucial roles and were strongly profiled during the pandemic. These included nurses, biotechnical lab assistants processing the Covid tests, teachers coping with the educational and social needs of pupils at a distance and pedagogues, especially those caring for the elderly.

2.4.2 Education and the labour market

Case Study 1

The university was engaged in reforming its master's programme during the pandemic. This was to address issues of educational quality and employability that were identified before the pandemic.

Case Study 2

The pandemic generated increased interest in some of the healthcare programmes. There was a small increase in the number of applicants for the nursing programme but in the summer of 2021 a national labour dispute raised awareness about nurses' working conditions and salaries and the number of applicants decreased again. The biotechnician and radiographer programmes saw significant increases in the number of applicants after the pandemic, presumably because of all the Covid-testing stations and x-rays.

The students in healthcare programmes were challenged in a different way to other students because they were needed in a sector that was under pressure and required more manpower. Whereas internships for other courses were cancelled, theirs were not. Teachers and study counsellors heard dreadful stories of healthcare students being put in situations where they had to handle pressure and responsibilities way beyond what they were ready for and what should be expected of a student. They had to relocate some of the internships to units where there were resources enough to teach them and where they would feel more safe. They could not just cancel their internships, because the students were badly needed as a resource in the healthcare system during the pandemic.

2.4.3 Relations with society

Case Study 1

When the campus university suddenly found itself included in the 'udflytning' cuts like the city universities, it was able to mobilise considerable political support from the mayors and organisations in its region and achieve a reduction in the cuts from 10% to 5%. It actively discussed with the mayors how to distribute some education programmes. In this sense, coordination between the universities developed a new political dimension, as the rector related:

By what logic are we structured as a university sector? By what logic are we distributing our common tasks? If one university shut down 10% of their student capacity and another does the same, without coordinating, some disciplines might end up completely disappearing from Danish universities. And if yet another establishes a campus in 'our city', who is going to be talking to the mayor, then?

Case Study 2

Among deans, teachers and students in the UC, there was a shared frustration that on one hand their professions are crucial to the functioning of the Danish welfare state and played key roles in society during the pandemic, and on the other hand the work of these professions was not properly acknowledged or rewarded. A student pedagogue described the frustration like this:

I think the reason that people choose to become nurses, pedagogues or teachers is that they are interested in relational work and in making a difference in the lives of others. But when we can then see that the lack of staff and the working conditions for these professions are so bad, that it is almost impossible to do a job that lives up to those ideals, people choose other professions instead. During the pandemic, the political system and the media expressed praise and appreciation for our professions, but it was all very hollow, as it has not been followed up by attempts to improve conditions. If you really wish to respect these professions, you must also be willing to put actions behind your words. It is really undignified for a political system to call certain professions 'the heroes of the pandemic' and push them to work extremely hard under difficult conditions, and then refuse to do anything to improve working conditions or salaries that could improve future recruitment.

A student from the teacher programme described his frustrations like this:

I think the skills of teachers were appreciated a bit more during the pandemic. People realized how hard it is to teach children when they had to do it themselves. The nurses experienced support and appreciation during the first part of the pandemic, when there were no vaccines and the patients got very sick and died. But that solidarity was not reflected in the way the recent conflict was handled. The nurses were demanding better salaries, more staff and better working conditions and they received nothing. The same goes for teachers and pedagogues. We cannot recruit enough students, so there is a lack of hands to do the jobs. If all these professions that society depends on to uphold the structures,

joined forces in solidarity, and asked for better salaries and work conditions for all of us, maybe we could create a change faster. People seem to forget the importance of these professions very fast.

The experience of the two students above is similar to the experience described by the deans and the teachers that were interviewed.

2.5 The workings of higher education institutions

2.5.1 Distance and online education

All the interviewees remarked on the enormous speed with which teaching had been turned online. They felt some students had benefitted, but most had not and this was not a mode of teaching they wanted to develop for the future. Some departments and universities have assessed their experiences, but this was piecemeal and there has not been a nation-wide evaluation. The civil servant from the Ministry of Higher Education and Science explained that before they undertook such an exercise, *'We need people to just come back and have a spring of normal terms. We need to go back to the good study life and to close social relations'*

Case Study 1

In 2012 the Danish universities started a collaboration with the Ministry of Higher Education and Science, called Danish e-infrastructure Cooperation (DeiC), in order to coordinate the development of digital infrastructures nationally and internationally. DeiC became instrumental for the digital transition during the pandemic, as otherwise the universities would have had to negotiate licenses individually with the owners of the digital platforms for teaching and research.

The university's e-learning consultant was central in the transition to digital teaching and fulfilled the organization's urgent need for a 'translator' between the technological and the pedagogical dimensions of crisis management. As a member of a small taskforce under the central crisis committee, he worked with representatives from administration, the digital department and top management to coordinate and support the digital

transition. The taskforce's most important issue was balancing technological limits and affordances with pedagogical objectives and faculty's digital competences. The e-learning consultant acted as a sort of diplomat, not just teaching faculty and staff how to use digital teaching platforms but building long-term trust in the digital modalities. The consensus of this study's participants was that this was a great success. Asked how the digital transition would have played out without an employee like him and his function, the e-learning consultant said:

There would have been much more reluctance from the academic staff with teaching obligations. My task has been to win their trust and make them engage in the digital transition, as well as to interpret what consequences top-down decisions have had for their everyday practices. Our university would also have had to dial down a lot more on its pedagogical ambitions for student-centered learning.

No pilot projects into digital teaching had taken place at the case study university prior to the pandemic. While all communication had been digitalized years before the pandemic, there had been no systematic experiments with digital pedagogy and there was no institutional strategy for it. The faculty had minimal digital competencies when the e-learning consultant, in a matter of days, had to lead the digital transition of the whole university. Management had chosen to support one platform, Microsoft Teams, but, in the name of freedom in teaching, faculty could use whichever digital tools they deemed most convenient. When everyone was sent home to work off-campus, demand for hardware and software soared – computers, webcams, programs – which put the university's IT department under a lot of pressure. As only employees were covered by the institution's procurement policy, students were not offered any support for lectures and teaching at home.

The case study university is an example of how distinct pedagogical and didactic ambitions clash with crisis management and the limitations of digital teaching. It has a strong profile anchored in problem-oriented project work and a student-centred pedagogical framework in which groups of students design projects based on their own academic interests. Many academics were apprehensive about whether it would be possible to translate this pedagogical practice into the digital space. This was the central

argument for holding on to on-campus teaching for as long as possible, for, as the university director explains:

Because we do student-led project work, we believed our pedagogical profile relied on as much on-campus activities as possible. I do not think we would have made the same decisions today, but at the time it was very hard to imagine that we would be able to successfully facilitate project work and student-led activities online.

All research participants considered the teaching during national lockdown in the spring semester 2020 to have been of extremely varying quality and very chaotic. Two redeeming factors, however, mitigated the regrettable experience. First, most courses were already halfway done by the time the national lockdown was announced and students were working on their projects for the rest of the semester. Secondly, students observed that academics quickly improved their digital teaching as they got more practice. However, it was impossible to cover all parts of the curriculum under the conditions of the pandemic. Although both students and examiners showed understanding of these circumstances, some students now express dissatisfaction that resources have not been set aside to compensate for the lost teaching.

Regarding student group work the most challenging time came during the beginning of the spring semester 2021. Every semester at the case study university begins with ‘group formation’, a student-led process which takes a couple of days as students coordinate around small tables, write notes on shared papers and discuss in plenary sessions. Since the national risk had been raised to maximum at the beginning of January 2021, the usually very intense and complex group formation process had to take place online. The e-learning consultant had been highly pessimistic about whether they could make it work satisfactorily for the students. He prepared a digital space that tried to simulate the very tangible tools that usually facilitate the fervent coordination like group tables, black boards and more. To his own surprise, it worked out well, exceeding all his expectations, and he received positive feedback from students.

There was student dissatisfaction, however, in January 2021 when some exams were being held on-campus despite a spike in COVID-19 cases. When government raised the

national risk level to maximum, these on-campus exams were suddenly made into off-campus exams, and they suspended the rule that students had to be notified at least two weeks prior to any changes in exam formats. This also came as a surprise to some members of faculty. The previous year academics had had to go through legal red tape to prepare for online exams, but now management seemed to completely ignore the bureaucratic procedures. The incident was described by one member of faculty:

What repercussions does a decision like that have for all the different organizational levels? In this case, there was not any time to make proper preparations, and financially the university would not be able to tolerate losing a whole semester worth of passed students. So the decision was simply forced down through the organization. 'This is what we do, no questions asked.'

Case Study 2

The improvement and expansion of digital learning was one of the focus areas of the university college's merger strategy. To implement this, they had mapped out all of their teachers' competences within the field of digital learning one year before the pandemic struck, so they already knew who was competent and who needed help developing those skills. The mapping has been updated, and it shows that the digital skills of the teachers have improved remarkably during the pandemic. They had a unit, before and during the pandemic, that worked exclusively on helping teachers improve their digital learning/teaching skills. Within a week of the pandemic, this unit focused on supporting the teachers to go 100% digital. Some of the teachers who had experience with online teaching, also supported colleagues. Within two weeks of the first lockdown, 80% of the lectures at UC had been transformed into digital learning. A student evaluation showed 75% were satisfied with the quality of the online learning.

Large-scale lectures on theoretical topics worked well in a digital/online and counselling and individual supervision also worked very well. But there were specific subjects where practical/physical skills and relations had to be developed that could not be easily transformed to digital learning. A teacher in the pedagogue programme describes how creative they had to be in transforming classes to online lectures:

During lockdown I was really in awe of how skilled and creative my colleagues are in the more practical and creative fields. Subjects like music, drama, outdoor, physical exercise, artwork etc. that normally require specialized rooms, artefacts and human interaction had to be taught online and in solitude. ... At some point, I ran out of ideas for physical exercises to do individually or in very small study groups. But then I found programmes in Norway and Ghana where teachers were working with circus acts as a form of pedagogical practice. We developed a curriculum together that also involved some theory on how to use circus acts as a way to develop play and learning, and their students and ours exchanged ideas and ended up doing an online circus show together. The students really enjoyed that because it was fun and different.

A dean mentioned things that could not be learnt online: physio- and ergo-therapy students had to do physical training exercises to learn how to transfer and rehabilitate patients, and nurses had to learn to take blood tests. Such students were given dispensations to come onto campus for exercises or lab work in smaller groups, even during the lockdown. Priority was given to getting these subjects back to physical, on-location teaching as soon as possible. Even so, not all were successful. A gym-teacher recalled:

In the teachers' education there is quite a strict curriculum. They must learn disciplines like ballgames, athletics, gymnastics and dance...But we could not live up to the requirements, and that was frustrating. The exams were not postponed, and our application for dispensation to change these exams to pass/fail was rejected, so in reality students had to take their exams without having received the learning exercises they were entitled to. For the ball-games exercises, the students could come and borrow a ball, so they could practise a bit of dribbling. But the whole relational part of it we could not exercise.

These experiences have some long-term and beneficial effects, as explained by the resource manager:

We now have a more nuanced and critical view on what can and what can't be done successfully online in terms of different types of teaching. We have realized

that some of the more theoretical preparations can work quite well and save resources, by being conducted online. So we now prioritize more of the confrontation-time with the students on campus on training practical, relational skills.

The transfer to online study counselling was a further area where the UC gained considerable experience during the pandemic. One of them explains:

We went from doing almost all of the study counselling face to face to doing all of the study counselling online through Zoom and Teams. It was actually not just a bad thing. The students contact us, because we are the ones with the overview of all the possibilities, when something has to be changed in their programme. The character of the conversations changed. We had more deeper conversations with students, they confided more in us than we were used to before the pandemic. Something more existentialist came into the conversations, because the students were sitting at home in solitude and were struggling with fears and loneliness. Sometimes the students we spoke to had not spoken to anyone for several days. The screen between us and the physical distance actually provided a safe space for deeper conversations. It became less confrontational somehow, and opened up for a more safe and therapeutic space. We are not offering actual therapy. But we could offer the students some comfort, care and relief in a time of fear and loneliness. We could be that person who had time and resources to listen to their distress.

2.5.2 Work of academics and support staff

Case Study 1

Supervision became an extraordinarily demanding burden for academics in addition to the chaotic situation surrounding the transition to digital teaching in the spring 2020. Because of the pedagogical framework of group work, supervision at the case study university has a substantial social dimension, meaning that beyond the purely academic challenges the student groups encounter, supervisors also provide guidance regarding group dynamics and teamwork. During the crisis management, this social dimension took

on a new kind of intensity and urgency. With students unable to meet up physically, and many also dealing with loneliness, anxiety and social isolation, the group work suffered greatly.

Academics' time for research, in turn, was put under pressure. Especially for those who had to take on more responsibilities in the home as day care and schools were closed during national lockdown (see also 1.4: inequalities in the sector). This issue was brought to the attention of top management, who, together with academic union representatives, took the position that, if needed, academics could compensate for the lack of research time by decreasing time spent on teaching preparation.

Case Study 2

The crisis management team established a crisis-hotline-mail, where all students and staff could contact them with questions concerning the pandemic and lock-down. One of those who answered those mails explained that in the beginning of the first lockdown it was so busy, that she got a swelling on her hand from writing e-mails all day.

The resource manager explained that during the pandemic, the collaboration between academics and support staff became closer, as the support staff had to be much more closely involved in solving problems like online-exams. This created a stronger sense of unity between the two groups and raised the respect and acknowledgment of the importance of the support staff. They became more equal. IT people had to work very closely together with didactic experts to quickly create online methods that functioned both technically and pedagogically.

Some of the teachers worried because they had to come to campus and teach students in the labs and training rooms, even during parts of the lockdown. They even had to accept those of the students who would not get vaccinated or tested. These students had a right to participate in the education just like the others. A few of the teachers were vulnerable because of age or chronic illness, so there were some who were not called in. There were also some teachers who really suffered from having to work from home and not getting the social aspects of coming to campus. Informal coffee meetings on zoom and other such activities were established to compensate for that.

2.5.3 Duty of care

Case Study 1

An open letter from a large group of Ph.D. students was published in the university's independent news magazine a few months into the first national lockdown. The letter described how their precarious conditions had been exacerbated by the crisis. They called for top management to advocate politically for salaried extensions. The pro-rector publicly replied and invited representatives to take part in dialogue meetings.

Research participants reported that in spite of the fact that the case study university did better in improving their Ph.D. students' conditions in comparison with other Danish universities, no extensions were offered and the compensation that they did receive could only be considered symbolic. They reverted to a certain unofficial manoeuvre that helps Ph.D. students to gain more time. By continuing to stay institutionally affiliated to the university, but without salary, they can continue working on their dissertations while also being eligible for unemployment benefits. Even though universities do not officially recognize this manoeuvre, Ph.D. students report that some administrative staff had been encouraging them to use this option as a way to make up for lost time during the crisis.

Case Study 2

During the lockdown the UC started to see cases of teachers having physical effects of sitting down and working in front of a screen extensively; back problems, bad shoulders etc. The UC's work-environment organization encouraged them to participate in gym exercises organized by gym-teachers and go for regular walks. Members of the management organized online morning singing on the last Friday of each month, where students and teachers could participate via Zoom. That was described as good for the feeling of unity. Teachers also had open Teams meetings and Friday bars to fight off loneliness.

According to the deans, all new students received a phone call from one of their teachers, to ensure that they were alright and had all the information they needed for starting up in their programmes, and to give them the feeling of being received by a real human being.

Another dean described how many teachers felt a strong concern for the welfare of their students and got permission to make phone calls to all students, to check in on their mental health. When we asked students about these phone calls, they did not recall them:

I have not experienced or heard of teachers who made phone calls to students. They might have called selected students, who did not attend the online classes, but I don't know about that.

We asked the two students we interviewed if they had used the crisis-hotline for getting information. One of the students replied:

Crisis-hotline? I never knew there was such a thing. I thought it was sometimes difficult to find information about where to get help. It was a bit random, what you came across as an individual student. Maybe the teachers should have used some of their time with students on informing them about these things.

To create a sense of belonging, the study council organized online parties for the students, including a drag show, fairy bingo and an online concert. For students who were about to graduate, they tried to do online celebrations and social events. Social activities like cooking together were prioritized for students who started their programmes during the pandemic. One teacher expressed her concern for her students:

The new students who had just started their first semester felt really detached, and I also struggled to get a feeling of who my students were. At some point I realized that some of these young students had not interacted with another human being for 5 days in a row. So, I insisted on meeting them. It was not compulsory for them to show up to these events where I invited them to come and meet me and each other, but they all did, because they were so deprived of human interaction and needed to get that physical sense of belonging to a batch and a programme... I became the anchor for many of the students, because I insisted on getting them together and meeting them physically. The topic I taught was completely irrelevant. I was the one who offered human interaction and a sense of content in their solitary lives.

Another consequence of the lockdown was that it became difficult to keep the student associations and extra-curricular activities going. An elected member of the student council explained:

During the pandemic many of the student organizations died out, mostly because the members finished their studies and it was hard to find people to replace them during the pandemic...The student bar and the different social clubs for students are all more or less dead at the moment as a result of lockdown, so they will need to be re-started by whole new groups of students after the pandemic. That might become a challenge.

Another student, who is also a member of the student council explained:

You lose motivation over time when there is no real interaction and sense of belonging. In the student council, we are concerned, because we can still see that students express a lack of belonging. All the social clubs and extracurricular activities closed down during the crisis and...it has been difficult to recruit new people for voluntary work, and as former volunteers have stopped because they finished their studies, we have not had that overlap and passing on the work to new people. So right now, the primary concern for the student council is to get all those activities kick-started again... Before the pandemic, there were basically two types of extracurricular activities: student politics and partying. Now we are trying to introduce a wider variety of activities like sports, comedy, flea markets, and clothes-swapping events. In that way we try to establish that sense of community and belonging to a wider group of students.

2.5.4 Governance and decision making

Both the civil servant from the Ministry of Higher Education and Science and the rectors and directors of the case study institutions described a very good cooperation during the pandemic. Political decisions were being made frequently and at short notice. As soon as there was a political decision, the ministry held an online meeting with the rectors or directors of the 37 higher education institutions to explain clearly what was required and the directors immediately conveyed this by email to all staff. The ministry then followed

up in meetings with administrative staff to find out what was needed to implement the requirements in practice. In this way, the ministry civil servant explained, universities changed their teaching to online within a day, and they set up testing centres within a week.

Case Study 1

Crisis management. The university had a permanent crisis committee, consisting normally of the university director and the economy and campus head manager. In February, prior to the prime minister's announcement of the national lockdown on 11 March, the crisis committee had already been expanded to fifteen members, including two representatives from all four departments, a vice dean and a head of secretariat, as well as the rector, a student representative, the head of academic development and the head of IT. This formal representation of all university organs made possible a central and comprehensive decision-making process. The student representative took part in meetings from the very beginning, under strict confidentiality and only in an advisory capacity, and expressed satisfaction with how the concerns of students were listened to and acknowledged during the committee's proceedings. The university director, who chaired and led the crisis committee, reported that he received only a handful of student complaints over the entire period. Academic staff were not included in the crisis committee, but the rector and university director held weekly briefing meetings with the academic union representatives to keep them up to date on developments in the crisis management.

At first, it was unclear whether they were preparing for a crisis and a closure lasting a few days, months or years. There was continued uncertainty. One of the most important responsibilities of the committee during the spring semester 2020 was continuously to interpret and communicate the restrictions introduced or lifted by the government and health ministry and ensure that students and staff received the same information to avoid confusion. Even whilst a government press conference was in progress, the university director would start drafting an internal communiqué on changes to university guidelines. The draft was immediately circulated to crisis committee members for comments, and the communiqué would be sent out by email to all students and staff, sometimes even before the government press conference had ended.

Decision making – the Master’s reform. While they appreciated the efficiency of the central and top-down crisis management regarding the pandemic, several research participants observed that a previously existing trend towards increasingly top-down steering was reinforced during lockdown. This was especially felt in connection with the university-wide process of reform to the Master’s level programmes. In February 2020, news that the reform process would start coincided with the most intense period of the first COVID-19 wave, causing considerable disturbances on two levels.

First, the case study university had a reputation for cultivating a lively university democracy and inclusive decision-making processes. Faculty and student representatives from the university’s two most important political organs felt these values were being eroding in tandem with top management becoming more distant and the board more averse to university democracy. As one member of faculty related:

The top-leadership is increasingly becoming more distant from the rest of the organization. For example, we are seeing more and more forums on top-management level being created, while things are stagnating on the collegiate level. Moreover, it seems to be a trend that leadership is only coming to the collegiate committees to inform about decision already made, rather than making decisions together with faculty.

Another has stated:

A lot of the information send out has been announced in a rather unclear way, ‘the university believes’ or ‘the university says’. Even though I am quite well informed about university politics on most levels, it has still been unclear to me, who ‘the university’ actually is. Who decides what the opinion of ‘the university’ is? Of course, the most obvious answer seems to me to be rector.

Specifically, they also criticised top-management for refusing to postpone the reform process when the national lockdown was announced and they thought bottom-up voices were being deliberately side-lined.

Second, on a person-to-person level, all sides experienced that conducting all meetings online considerably lowered their quality. Nevertheless, interviewees also pointed out that the online format made it easier for some individuals to take the floor and to have their voices heard. Overall, however, the ability of representatives to engage meaningfully with each other in discussions and reflections on the future of the university was constricted by online meetings. One research participant related how the lockdown damaged the informal decision-making processes that accompany a major reform. Lockdown made impossible the everyday conversations and discussion in and out of offices, daily mundane activities that normally help to create local collegial alignment regarding university-wide decisions. At first, this participant did not even register this lack of informal alignment, but a backlash from colleagues no longer simply sitting down the hallway made the research participant realise this crucial component. This informal discussion through everyday contact was difficult to simulate in other ways.

All in all, the Master's reform has been a rather extreme and extraordinary event, taking place in the middle of the first chaotic phase of the pandemic. The following quote from a member of faculty relates this experience:

It was a crazy process already before the pandemic hit. The whole thing has been really, really crazy. It has been inspiring to see colleagues full of initiative and energy keeping us going, but on reflection I sometimes think that it's actually unbelievable we are still here. I get the feeling now and then that the whole university could simply disappear all of a sudden. This kind of anxiety of total decline, as a result of how intense it has been.

Case Study 2

As part of the merger, the UC had established a task force for operational management in any type of crisis. It was led by the head of resources and IT and other members were the head of administration, the head of communication, the coordinator of international students, student counselling, and management. At the onset of the pandemic, students and teachers were included in the crisis management team to create more coherence and trust on all levels of the organisation. There were also 7 local crisis operational teams set up at the different campuses.

The informants at the UC all agreed that decision-making processes changed during Covid. The crisis management team took over a lot of responsibility for everyday management and management became very operational, top-down and centralized. It was not an entirely positive experience. However, all the informants described a sense of trust in this top-down crisis-management structure and according to one of the deans, the management team did not experience distrust or lack of legitimacy. There was clarity in communications and the rector sent direct information and updates on the situation to the students. A teacher describes how trust was combined with disquiet at centralisation:

We had overall trust in the management of the school during the pandemic. There was a team spirit and a will to keep the programmes running throughout the pandemic.

Among the teachers there is a concern about the consequences of adapting to more e-learning. The management of the school have decided to make all the materials produced by teachers the property of the organization and accessible to all other teachers. This was a very top-down decisions and many teachers have protested against this, as we have not been heard in this discussion. We have always been good at lending materials to each other and helping each other out. Now colleagues can use your materials without asking you first. It means, that materials can be re-used over and over by any of your colleagues, and you never know if a colleague has used your materials before your own plan of introducing those materials to the students. Therefore, some teachers now choose not to share their powerpoints and other materials on the online platforms. We have a feeling of losing didactical integrity as teachers and a fear of management using this as a way to legitimize cutting even further down on staff and preparation time.

A student from the student council describes the management during Covid like this:

In the crisis-management team we have a student representative from the student council. So we are heard and we do have some influence on how things are being handled. Our role has very much been to gather information on the wellbeing and the frustrations of the students and bring that to the table of the crisis management

team. It made a lot of sense to have students represented in the crisis management team. We know better than teachers and deans what it is like to be a student during a lockdown. But many decisions concerning Covid were very top-down, and we had to just find the best possible ways to carry out those orders.

My experience is that there was trust in the management during the lockdowns. Almost all students did their best to cooperate and follow the guidelines and restrictions. And after we started coming back to campus, it felt quite safe with the restrictions. Of course with 20,000 students there will always be some who disagree and complain, but a vast majority of us cooperated and followed guidelines, trusting that the restrictions were adequate and necessary.

For the future, the approach to on-line learning is more nuanced and critical now. There is now an acknowledgement among teachers that certain types of activities can be done successfully online. Some of the online teaching on theoretical topics works very well and online lectures, texts, the self-tests make students better prepared for classes. All the interviewees agreed teachers feel more inclined to use these methods in future, compared to before the pandemic. However, both deans and teachers see digital learning as a useful supplement that can sometimes function as a way of minimizing costs on certain lectures so that resources can be relocated to more classes that require on-site activities with physical presence: lab-work, gym exercises, group work. There has been a strong realization of how essential physical presence, interaction and training is to develop relational and practical skills that cannot be taught on-line. In the words of the dean of the healthcare programmes:

A profession that rests on relational and technical skills can never be taught entirely as online learning. Learning to be a part of a professional team cannot be learned from solitude at home. And to transform knowledge to practical skills, takes physical practice. I don't think we want nurses who have to handle patients that go into anaphylactic shock or suffer a cardiac arrest, who have never received physical training in how to react in these situations but have only been taught online. These skills have to become automated through practise.

Administrative and support staff are now developing more flexible policies about working at home and study counsellors say they have learnt valuable lessons during the lockdown:

We have definitely learned some important lessons on more diverse ways of offering student counselling. The online counselling was clearly working better than face-to-face counselling for some of the students, so we will continue to offer that as an option. We have also found out that we get in touch with other groups of students when we have longer opening hours and are occasionally open on weekends as well...The most important lesson we learned, is that counselling does not lose in quality from being done online.

But the limits of working online are clearly recognised. We asked the resource manager in the UC about the idea of ‘universities without walls’:

From the perspective of a resource manager, the idea of universities without physical locations is the ultimate dream. It would save us huge amounts of money, if we did not have to invest in buildings and maintenance, and that money could be invested into more and better lectures and more flexibility. However, the idea is utopian. Professions involving relational work and physical skills like nursing, physiotherapy and pedagogy can never be taught successfully without physical presence.

Pre-pandemic there were informal discussions at UC about creating more web-based education programmes to enhance recruitment in more remote areas and save costs. After the pandemic, even with the political focus on ‘*udflytning*’, the deans no longer see that as a valid option. They have, in their own words, become painfully aware of how much physical presence and interaction means to relationally based education.

2.6 Conclusion and Summary

2.6.1 Sustainability of the higher education system

From 2015 to 2020, government has been ‘re-profiling’ higher education by cutting university budgets by 2% per year. In 2017 a further policy required higher education institutions to reduce the number of student places on English-medium courses. This aimed to reduce the number of European students receiving Danish student grants, but it also limited the recruitment of fee-paying international students. In 2021, the third phase of this de-internationalisation policy cut international students at university colleges.

Government, supported by a majority of political parties in parliament, developed a Relocation (*‘Udflytning’*) policy during the pandemic and launched it in 2021 when universities were managing the relaxation of lockdown. This policy is to cut all student places in higher education by up to 10% by 2030, except for places that universities and university colleges relocate to rural Denmark. This reverses the policy since 2007 of increasing mergers to form a smaller number of larger higher education institutions concentrated in the four main cities. Now the aim is to ‘rebalance’ between the cities and more rural hinterland. While there was general agreement that rebalancing was needed, this way of doing it was described as ‘pure politics’ and met with widespread dissatisfaction in the academic community. For universities, whether they choose to relocate some education programmes or make cuts, there are concerns about the viability of research communities. For some university colleges, the policy exacerbates problems recruiting students for welfare state professions.

The governance of universities has evolved gradually since a major reform in 2003 which established ‘self-owning’ higher education institutions to the point where government expects political decisions to be implemented quickly by a top-down hierarchy of appointed leaders in what is referred to as ‘commando-way steering’. Government exercises this tight control through changes to the payments for teaching. Payment is only made for each student who completes exams, but the rate of payment is increased or decreased to enforce government policies (e.g. payment is cut for international students and increased for student places moved to the countryside).

2.6.2. Institutional priorities

Before the pandemic, the University had two institutional priorities: to revise their master's programmes and resolve financial problems. Then the pandemic took priority, and work on an institution-wide reform of master's provision continued online. The financial problems were put on a back burner.

At the University college, a merger between two colleges had just been completed before the pandemic and the merging of staff groups and a comprehensive education reform continued during the pandemic.

Internationalisation: Many EU students lost their jobs during the pandemic, and if they could not work 12 hours per week, this made them ineligible for the Danish student grant. PhD students are expected to spend a period researching at a leading university abroad and these plans were severely disrupted. The UC recalled its students on placements abroad, but its international students stayed in Denmark, so there was an imbalance between in-coming and out-going students, for which the UC is penalised through the teaching payments.

Collaboration: Both the universities and the university colleges collaborated closely through their national association and worked closely and well with the Ministry of Higher Education and Science to manage the pandemic and collect data to guide decisions. University leaders developed a close and constructive relationship with the ministry, but this positive collaboration changed abruptly with the announcement of the Relocation policy.

Inequalities: In both higher education institutions, interviewees agreed the staff most affected were especially single parents of young children, newly appointed staff without teaching experience, and people living alone. University respondents saw childcare issues as gendered; UC did not.

The students most affected at UC were on programmes with the lowest admission requirements who were not so disciplined or able to manage their day, and those starting

during the pandemic who had just moved to a city, without friends or networks. Some introverted students blossomed through on-line education.

2.6.3 Purposes of higher education institutions in society

University science gained new recognition and university college professions (nurses, biotechnicians, teachers, pedagogues) played crucial roles in the pandemic. After the end of lockdown, there was deep frustration among staff and students about lack of political recognition, as seen in the post-pandemic labour dispute between nurses and the government over recruitment, working conditions and pay. The UC is still struggling to recruit sufficient students for labour market needs.

2.6.4 Working of higher education institutions

Digitisation of education: Both the university and UC successfully transferred from face to face to online teaching within a couple of weeks of the lockdown. Both had a staff member or unit that worked closely with teaching staff and focused especially on how to connect digital technology to teachers' pedagogies. There are many examples of teachers' innovations and collaborations. Student counselling increased and found new approaches and successfully adapted to 100% online.

Online teaching experience led to a more nuanced view of digitisation. Especially theoretical topics benefitted from going online. University group work suffered along with UC disciplines requiring training in practical skills (e.g. taking blood samples) and relational competences that cannot be done online. Even the UC's resource manager, whose 'ultimate dream' is the savings that would come from universities without a physical location, recognises that teaching requires a physical presence. It was widely agreed that online education should not replace face to face education in the future, but no national evaluation of online teaching has been conducted.

Work of academics and support staff: collaboration between academics and support staff became closer. But PhD students wrote an open letter about their increased precarity, when research was delayed by lack of access to labs or inability to travel. Some symbolic compensation and no extensions were offered.

Sociality both increased and decreased. UC academics and administrators organised morning singing, online gym classes, open Teams meetings and Friday bars to create sense of community. Academics rang students to check on their welfare (although student interviewees had not been contacted). But student associations died out when the cohort of organisers graduated and left. It is proving hard to build up new student associations from scratch.

2.6.5 Governance and decision making

Both the UC and the university had a standing crisis committee, which was expanded to include deans, academic development, IT, and student representatives and they set up a number of task forces. The university communicated with academics through their union representatives. Meetings were at least weekly and dealt with digitalisation, bringing students home from abroad, staff and student welfare, dispensations to change teaching and examining regulations etc.

Academics and students who were interviewed at both institutions had confidence in the way the crisis management had been conducted. Both institutions made speedy and clear communications to all staff and students on how the fast-changing national regulations would be implemented.

Decision making became more top-down and centralised. In the UC it may be returning to normal. In the university, the major reform of master's programmes was conducted online and without informal discussion between staff through everyday 'corridor' contact. There are concerns that this experience of decision making may have affected the university's tradition of lively democracy and inclusive decision making.

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Chapter 3 England

Que Anh Dang,⁵ Ludovic Highman⁶ and Miguel Antonio Lim⁷

3.1 Overview of the research conducted

Interviews	
National system-wide actors Interviewees' profiles (e.g. ministry, politicians, unions, professional associations)	01 – representative of university association (University Alliance) Universities UK (UUK) did not respond even though several attempts were made to reach out to them, indicating either institutional fatigue with regard to the topic, lack of human resources to respond, or potential sensitivity of the topic.

ENGLAND (only)	Case 1 (GREEN university)	Case 2 (BLUE university)	Case 3 (PURPLE university)
Type of institution (e.g. large/small, public private, research/vocational)	Large public modern university with over 35,000 students on 4 campuses in the UK and around 17,000 students studying for a GREEN degree at their branch campuses and transnational education (TNE) programmes around the globe. (39,145 students study in the UK in academic year (AY) 2020/21, according to HESA)	Medium sized, research led university that originated from a college of advanced technology (CAT), in the range of 15,000-20,000 students. (18,555 students in AY 2020/21) according to HESA	Very large public university with over 40,000 students. A 'red brick' university which is part of the Russell Group. This university offers a comprehensive range of courses and degrees. (44,635 students in AY 2020/21 according to HESA)
Number of interviews	6	6	5
Top leadership (number/positions)	2	1	2

⁵ University of Coventry

⁶ University of Bath

⁷ University of Manchester

Middle leadership (number/positions)	2 (also academics)	1	3 (also academics)
Administrative staff (number/positions)	2	2	0
Academics (number/positions)	2 (also middle managers)	2	3 (also middle managers)
Students (individuals or group interviews?) (number of interviews)	0	0	0
Main characteristics of the sample	<ul style="list-style-type: none"> - Senior leadership representatives: one is responsible for Education and student experience, the other is responsible for internationalisation. - Middle managers are both senior academics and Associate head of school (one male and one female, one is British and the other is non-British). One is at the faculty of Health and Life Sciences (HLS) and in charge of mental health and well being of students and staff. The other is at the faculty of Engineering, Environment and Computing (EEC). - Administrative representatives (one male and one female) are in charge of library services and academic writing support for both staff and students. 	<ul style="list-style-type: none"> - Senior leadership representative (1): one responsible for strategic review and policymaking. - Middle manager representative (1): one administrator responsible for the internationalisation activities of the University. - Administrative staff (2): one is responsible for library services while the other is responsible for curriculum design and learning development. - Academic staff (2): 1 is a Lecturer in the School of Management (social sciences), the other one Lecturer in the School of Chemical Engineering (STEM). 1 of them is an international 	<ul style="list-style-type: none"> - Senior leadership members who were: (1) responsible for the overall COVID-19 response and (2) overall reputation and communication for the university. - Middle managers: One of them is a programme leader responsible for a blended (online and in person programme). Another is a programme leader on a totally in-person delivery programme and is also a middle manager responsible for student well-being. Finally, another middle manager was in charge of Equality,

		recruit, 1 of them holds a British passport and went through the UK higher education system.	Diversity and Inclusion Issues. An interview with an administrative staff member will be carried out.
Other data (specify) (e.g. Documents, media analysis)	National strategies and reports, Annual Institutional reports, University groups (University Alliance, Russell Group, Universities UK) reports on universities' responses to COVID-19, Video recordings of Top Leadership 'roadshows'.		
Notes:	We understand from the overall project design that interviews with students are optional. So far, we have not included students in our sample for interviews, but we may be able to add them in the coming months if all other countries in this project agree so.		

3.2 Country profile

3.2.1 United Kingdom (UK)

Notes: All the basic data below cover the UK as a whole. However, the three cases investigated in this report can only provide evidence for the situation of higher education in England during the pandemic (not in Wales, Scotland or Northern Ireland). Because of the devolved nature of power in the UK, the four nations have managed the pandemic differently. There are distinct legislatures (e.g., the Scottish Parliament) and governments in Scotland, Wales and Northern Ireland, which have powers over a range of policy areas, including health and education, which had previously been the preserve of the UK Government.

3.2.2 Basic data about United Kingdom

UK Population (2020)	67.1 million ⁸
Unemployment aged 16 and over (2022)	3,8% ⁹
GDP per capita in purchasing power standards - PPS (2019)	105 ¹⁰
COVID-19 caused GDP drop in Q2 2020	-20,4% ¹¹
Income inequality in the UK as measured by the Gini coefficient index (2021)	34.4% ¹²
Human Development Index (2019)-positioning at 13 out of 189 countries and territories	0,932 ¹³
Government form	Unitary parliamentary constitutional monarchy
Political orientation of the current government	Conservative (Conservative Party)

3.2.3 Characteristics of the UK Higher Education system

Population of students (2020/21))	2,751,865 in 2020/21, an increase of 9% from 2019/20. Including higher education students registered at Further Education providers throughout the UK, the total number of higher education students was 2,912,380 ¹⁴
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⁸ <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/bulletins/annualmidyearpopulationestimates/mid2020>

⁹ <https://www.ons.gov.uk/employmentandlabourmarket/peoplenotinwork/unemployment>

¹⁰ The values are also offered as an index calculated in relation to the European Union average set to equal 100. If the index of a country is higher than 100, this country's level of GDP per head is higher than the EU average and vice versa. https://ec.europa.eu/eurostat/web/products-datasets/-/sdg_10_10

¹¹ <https://www.ons.gov.uk/economy/grossdomesticproductgdp/articles/coronavirusandtheimpactonoutputintheukeconomy/june2020>

¹² <https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/incomeandwealth/bulletins/householdincomeinequalityfinancial/financialyearending2021>

¹³ <http://hdr.undp.org/sites/default/files/Country-Profiles/GBR.pdf> . United Kingdom's HDI value for 2019 is 0.932— which put the country in the very high human development category—positioning it at 13 out of 189 countries and territories

¹⁴ <https://www.hesa.ac.uk/news/25-01-2022/sb262-higher-education-student-statistics/numbers>

Number of higher education institutions (HESA, 2019/20)	197 higher education institutions ¹⁵
Public spending on tertiary education as % of GDP	3.9% (2018/19) 4.4% (2020/21) ¹⁶
Fees	Undergraduate level (home/domestic): £9,250 per annum Undergraduate level (international/overseas/ non-UK): Variable because set by the institution but in the region of x2 or x3 or x4 the home fee (£20,000 - £39,010) ¹⁷
International students (% of total)	20.7% [Universities UK, 2020] ¹⁸
Main international student origin countries	Academic year 2019/20 (HESA stats.) ¹⁹ Total UK students: 1,975,380 Total other EU (exc. UK): 147,800 Total Non-EU (international): 408,825 (Total non-UK: 556,625) Top 10 countries of domicile include (2019/20, HESA): <ol style="list-style-type: none"> 1. China (141,870) 2. India (55,465) 3. USA (20,730) 4. Hong Kong (16,370) 5. Italy (14,585) 6. France (14,015) 7. Germany (12,875) 8. Malaysia (13,490) 9. Nigeria (13,020) 10. Spain (11,270)
Number of Institutions in ARWU 2021 Top500	38 ²⁰

¹⁵ <https://www.hesa.ac.uk/news/19-01-2021/sb259-higher-education-staff-statistics>

¹⁶ <https://commonslibrary.parliament.uk/research-briefings/sn01078/>

¹⁷ <https://www.ox.ac.uk/admissions/undergraduate/fees-and-funding/course-fees>

¹⁸ <https://www.universitiesuk.ac.uk/universities-uk-international/insights-and-publications/uuki-publications/international-facts-and-figures-2020>

¹⁹ <https://www.hesa.ac.uk/data-and-analysis/students/where-from>

²⁰ <https://www.shanghairanking.com/news/arwu/2021>

3.2.4 Overview of the English higher education sector

Higher education in England can be traced to the documented teaching at Oxford in 1096 and, soon after, in Cambridge. Outside England, higher education developed in Scotland with the establishment of four Scottish universities – St Andrews, Glasgow, Aberdeen and Edinburgh - by the end of the 16th century. In England further expansion occurred in the 19th century with the royal charters awarded to Durham, University College London and King's College London in the early 1800s and soon after to the 'red-brick' universities that grew in the major industrial cities including Birmingham, Bristol, Leeds, Liverpool, Manchester and Sheffield. Finally, further waves of expansion in the 20th century saw a range of institutions established in the 1950s-1960s with significant differences in the purpose and focus of institutions set up during these decades. Finally, a large wave of expansion came about in 1992 when the UK government conferred university status to polytechnic institutions.

Alongside the expansion in the number of institutions, the number of English students in higher education increased from 8% in the 1970s to just over 50% in 2011-2012, following major drives to 'widen participation' and policies by the then New Labour government to encourage at least half of school leavers to enter into further and higher education.

In England, universities are neither government owned nor run. A great majority of universities in England, all but 20, are 'exempt charities' which means that they are regulated not by the Charity Commission but by the Office for Students (OfS) and UK Research and Innovation (UKRI) which replaced the Higher Education Funding Council for England (HEFCE) since 2018. English universities have their own governing boards which determine strategy and set out operational priorities. The Education Reform Act (1988) gives universities the power to carry out what their trustees believe necessary to provide further education, higher education and research. While they are not directly run by the government, they do, however, receive various forms of public funding – although this can vary between institutions. Funding can come in the form of research grants or support for teaching activities, although the latter has been decreasing due to the emphasis on tuition fees. Research funding is principally awarded through the various research councils under the umbrella organisation - UK Research and Innovation (UKRI). On the

teaching side, universities are able to access funding via the Student Loans company which covers the tuition fees of English students, currently capped at £9,250 for undergraduates. Universities, in turn, are subject to certain regulations aimed at protecting student rights which are enforced by the OfS. Academic standards are enforced via the Quality Assurance Agency (QAA) which conducts reviews of all institutions that receive funding.

In 2019/20, 197 higher education providers reported staff data to the Higher Education Statistics Agency (HESA). Of these providers, 166 were present in 2018/19 and 31 were new additions after being added to the [Office of Students Register](#) in the Approved (fee cap) category. There is a wide variation in size – some institutions have only a few thousand students while the largest (apart from the Open University) enrol over 40,000. The Open University is a distinct institution providing distance education.

Entry to universities is largely managed by a central agency – the Universities and Colleges Admissions Service ([UCAS](#)) which manages the process for most undergraduates. Students often apply directly to the institutions for postgraduate study. Undergraduate or bachelor's degrees usually last three years in England. At the postgraduate level, (taught) Master's degrees typically last one year and doctoral degrees last a minimum of three years.

In recent years, the UK government has enacted policies through certain ministries, such as the Department of Business, Energy and Industrial Supply, to encourage students to take up science, technology, engineering and mathematics programmes (STEM), although there is also a large and well-developed variety of social sciences and humanities provision. Another policy drive has been to increase participation from a wider section of socio economic and ethnic backgrounds with those from lower socio-economic classes and from minority ethnic groups less well represented at 'high-tariff' (or more selective) universities. Increasing participation of students from disadvantaged backgrounds has been a major priority of the UK's new Turing Scheme, which replaced the Erasmus+ programme from 2021-2022, following the UK's decision not to participate in Erasmus+ in December 2020. As of July 2022, association to Horizon Europe, the European Union's (EU) research and innovation programme, while still a priority for the UK government, is still uncertain following ongoing disputes over trade in Northern Ireland, although it

was agreed in principle in the EU-UK Trade and Cooperation Agreement signed on 30 December 2020.

3.2.5 The Pandemic in England – overview and timeline

As higher education providers in the UK are autonomous institutions, they were expected to identify and put in place appropriate plans, in line with the government guidance specifically designed for the higher education sector and any other relevant government guidance, based on their individual circumstances. The guidance for the higher education sector was first published only on 3rd June 2020, three months after the school closure and the first national lockdown in March 2020 (Department for Education, 2020).

Universities are independent and unlike schools they are responsible for the decisions they take in response to the coronavirus pandemic. Action taken by one university might not be best for another. The Government will support the sector to do what is best for students up and down the country (Universities Minister Michelle Donelan as cited in Meadwell, 2020).

The ‘Higher education COVID-19 operational guidance’ has been regularly amended in accordance with the government’s guidelines throughout the pandemic. For example, guidance on student shared accommodation, travels during Easter or Christmas holidays, NHS COVID-19 test and trace, visa for international students, etc. at different points in the timeline above. It is important to note that universities also observed the specific rules and guides in the local breakouts and multi-tiered lockdowns across geographical locations during the pandemic.

The timeline of the COVID-19 pandemic situation in England, 2020-2022



Source: compiled by the authors, 2022

3.3. Sustainability of the higher education system

3.3.1 Policy and funding priorities

Financial sustainability

2012 higher education financial reform

In England, there are two main sources of income for higher education institutions - direct funding through the funding councils for teaching and research and student fees. From 2012, English higher education underwent fundamental financial reforms. The government raised the cap on tuition fees for new students to £9,000 in 2012/13 (home and EU students) and cut most ongoing direct public funding for teaching in England. Financial support through the funding council for teaching fell even before the 2012 reforms and was cut particularly quickly from 2012 to 2015. This shifted the balance of higher education funding further away from the state and further towards the individual who benefits.

Additional reforms include: a) maintenance grants (i.e. subsidies from the government to cover living expenses) for new students were abolished from 2016/17 and replaced by

student loans; b) the government decided to freeze the repayment threshold for all post-2012 borrowers for five years; c) there was a plan to allow universities offering ‘high teaching quality’ (TEF rankings) to increase fees in line with inflation from 2017; d) the discount rate used for the public accounting of loans was reduced from 2.2% to 0.7% and extend the write-off period of loans from 25 to 30 years (Bolten, 2022).

2019 Augar report

In 2018 the government commissioned a wide-range review into post-18 education and funding led by Philip Augar – a former investment banker. Subsequently, the Review – entitled ‘Post-18 review of education and funding: independent panel report’ - was published in May 2019. The report looked into how future students will contribute to the cost of their studies including the level, terms and duration of their contribution. Crucially, although the home (i.e. UK domiciled) undergraduate tuition fees are capped by the government of each nation (England, Northern Ireland, Scotland and Wales), universities don’t have standardised fees for overseas students, thus allowing them to charge higher fees.

Research funding

Following the Nurse review recommendations in 2015 to create a single non-departmental public body operating at arm’s length from government, the new body known as UK Research and Innovation (UKRI) was set up in 2018 by bringing together seven research councils, Research England (previously the Higher Education Funding Council for England HEFCE), and Innovate UK.

Research England funds the research capacity and infrastructure- such as the salaries of permanent academic staff, premises, libraries etc. while the research councils fund specific research projects and PhD studentships (UKRI, n.d.).

Due to COVID-19, the UKRI funding cuts, announced on 11 March 2021 has affected many on-going and future research. The rationale for the government’s decision is that the UK is facing severe financial pressures as a result of COVID-19 and its impact on the economy. Consequently, the UK government has decided to reduce the funds available for Official Development Assistance (ODA) from 0.7 to 0.5% of GNI. Over 800 projects

in 69 ODA countries are affected, not least in the UK. The enactment of these funding cuts is being transferred to universities. This led to a £120m gap between allocations and commitments in UKRI planned ODA expenditure for FY21/22 (UKRI, 2022). At the time of writing, the consequences of the cuts are beginning to bite. Some projects are or will be terminated mid-cycle.

Financial uncertainties at three English universities

GREEN university

- It became clear in the interviews with the leadership at GREEN university that the pre-COVID-19 political debate on higher education funding as the result of the Augar report continue to influence the national funding priorities and cause financial uncertainties at the institutional level. One of the 53 comprehensive recommendations of the Augar report is to restore more government's control over taxpayer support and reduce what universities may charge each degree student.
- *'Universities should find further efficiency savings over the coming years, maximum fees for students should be reduced [from £9,250] to £7,500 a year, and more of the taxpayer funding should come through grants directed to disadvantaged students and to high value and high cost subjects.'* (Augar's report, p.10).
- In January 2021, the UK government issued an interim conclusion on the report and stated that the government focuses on the response to the pandemic and that now is not the right time to conclude the report in full. However, the government will 'remain committed to introducing further reforms that will ensure a just and financially sustainable student finance system, drive up the quality of higher education provision and promote accessibility for students' (UK Gov 2021 Interim Conclusion). The government also announced that the maximum tuition fee cap will be frozen again in 2021/22 at £9,250 per year for home students.
- The leadership of GREEN university commented that following the recommendation of the Augar Review, the government is expected to reduce the tuition fee cap, increasing the loss higher education institutions make per UK student. Currently GREEN makes a loss of £500 per UK undergraduate degree which could rise by another £500-£1,500 if the government acts on the review recommendations. They also predict that funds will move away from higher education to Further Education (FE) in the coming years according to the Conservative manifesto. Therefore,

GREEN has a head start on changing its business model, for example GREEN has acquired several FE providers, and increased the undergraduate to postgraduate conversion rate to 17% (against the sector-leading 20%) and will continue to work to increase this further.

- Commenting on the UK research funding, GREEN university leadership expressed their view that research funding under the Conservative government is set to move into [centres of excellence](#) and consortia, rather than specific universities, with areas of priorities being artificial intelligence, life science, clean energy, space, computing and robotics. The implications of this funding model are more significant for Russell group universities than for the post-92 universities like GREEN university.
- Access to EU funding streams is expected to taper out over the next few years bringing financial challenges more specific to GREEN. The direct impact of Brexit, both in terms of finances and recruitment, will also become clearer. GREEN has identified £108 million in potential revenue loss over the next four years due to Brexit, which GREEN prepares to address in order to lessen the impact. GREEN has created a dedicated space on its internal staff portal for all Brexit updates.
- At the time of writing this report, several policies and initiatives have been introduced in the UK following the UK withdrawal negotiation, such as the Turing Scheme was launched to replace the Erasmus scheme and Turing scheme provides funding to higher education institutions, FE and VET colleges, schools to offer mobility experience across the world for their students and pupils. Another new initiative is the UK's association to Horizon Europe whereby UKRI pays for UK higher education institutions participation in the Horizon Europe research funding scheme.
- GREEN university has participated in both Turing and Horizon Europe schemes to diversify its funding sources. It has been successful with the Turing scheme funding, but facing challenges with the Horizon Europe scheme due to the delayed associated status of the UK caused by the European union.
- A vitally important stream of income for GREEN is tuition fees from international students who study on its UK campuses or in transnational education (TNE) programmes overseas. More details on international activities are in the section on Internationalisation below.

PURPLE university

- As a research intensive university, there was significant concern over the financial sustainability of the institution given that: cost analysis showed that research grants did not fully cover the full economic costs of research and that the student fees for 'Home' students had been capped and were potentially susceptible to a reduction (see impact of the Augar report above, in context of GREEN university's response). Staff costs continued to increase and there was mention as well of increasing pension obligations. Thus the only area of significant financial contribution was in the growth of international students. Here too there was acknowledgment of risk, in particular on the reliance of the institution (and to some extent the wider sector) on students from China. In the end, however, international students were not significantly affected and even increased.
- While acknowledging the funding issues faced by the institution, some respondents (P2, P3, P4) also claimed that 'widening access' to higher education was a significant sectoral issue and that increasing economic inequality had to be acknowledged in the patterns of admissions to elite / more attractive universities in the system.
- To protect financial sustainability, PURPLE University is conducting a strategic review that has implications for the evolution of its size and shape. To sum, certain departments / study programmes that make a larger contribution to the University's overall finances would grow to be more aligned to the average proportion in universities in its peer group (Russell Group).

BLUE university

- For BLUE University, financial sustainability pre-COVID-19 was a major issue, especially when talking to managers (P1 and P2). The capped income base due to tuition fees not being pegged to inflationary increases in the undergraduate home fees has led the institution to intensify its international recruitment to make up for the shortfall. A decline of Chinese students was a particular concern, perceived to be due to a growth in homegrown university places in China and political uncertainty, according to P1. Recruiting international students, and the financial windfall associated with such recruitment of high fees students, was a theme that emerged from almost every participant (five out of six).
- Brexit was also a major concern, in particular in terms of the impact of the government's immigration policies and the messages that might send out to

international students about how welcoming England or the UK is as a destination in the longer term. Its impact on Erasmus and European student mobility more generally was a concern. It was also considered a major concern in terms of the availability of research funding streams.

- Finally, and also related to institutional type, as a legacy from the institution's foundation in the 1960s, capital investment plans were a major preoccupation from the perspective of senior management (P1), in particular dealing with the renovation of old buildings and the so-called asbestos legacy challenge.

Summary on financial sustainability:

The major factors that influenced the financial sustainability of all three cases include:

- higher education public funding reforms in England since 2012;
- Brexit which reduced both research funding opportunities and student recruitment;
- The pandemic which caused economic slow-down and hence affordability for international students (the parents of UG students) and mobility restrictions from the major sending countries (e.g. China).

B) Have new digital governance perspectives developed at national level or within the case-study institutions?

Decision making online/More people were included in this modality/More emergency meetings

GREEN university

The university has immediately set up a special COVID-19-response Task Force and a dedicated communication strategy, which includes a dedicated webpage to share information on COVID-19 on the university website, Staff portal and Student portal, with special sections for teaching and learning, well-being, accommodation, international students, testing, and confirmed COVID-19 cases across different campuses (of staff and students on and off campus premises).

The highlight of all the virtual communication channels is the Vice-Chancellor's virtual Roadshow which was organised almost every month during the pandemic. The top

leadership personnel co-presented alongside the VC to update staff and students with new policies and plans. These online live talks and video recordings with transcribed summary were made available on internal staff and student portals.

GREEN has emphasised the differences between ‘COVID-19 guidelines’ and ‘Support and Help’ offered by the university and stakeholders. The focus is on the latter where concrete and timely actions happened on the ground. An online survey about home working equipment for staff was launched in May 2021 to ensure suitable home setup for remote working and it must be assessed for the longer term. Equipment such as computers, screens and chairs were delivered to staff home or collected from campuses in the summer 2020 to prepare for changes in the government guidance that may require further closure beyond the new academic year in September 2020. Regional differences within the UK in ongoing restrictions were also considered in the ‘return to campus’ plans. Any return will be for very small numbers to start with, with staff notified at least a month in advance. Nobody will be pushed to return if this will cause issues for them, and managers will be as accommodating as possible to individual needs.

The COVID-19 Task Force led by the Vice Chancellor already in May 2020 projected GREEN’s financial position for the years to come and present scenarios and solutions. One of the solutions was to change the holiday year (ending in August) to align with the financial year (ending in July) to make the staff costs (salaries) in the bottom line of the balance sheet more positive and prevent redundancy.

At PURPLE University, the use of digital tools was mentioned by P2 as an enabler of continued meetings and governance processes during COVID-19. In particular there was also mention of how Zoom meetings allowed for greater accessibility of certain types of meetings to a wider group of people.

Another respondent, P3, claimed that digital platforms allowed for more transparent processes in meetings. At PURPLE University, the Senior Leadership Team conducts

regular meetings (over zoom) with the entire University Body. The recordings of these meetings are then made available on its staff website.²¹

In terms of digital governance within the case-study institution, all managerial or professional services staff at BLUE university (P1, P2, P3, P4) were unanimously confident governance systems were at least as transparent and effective as before, and perhaps even more effective because more flexible, fast and agile. One participant highlighted that the university had been more responsive than usual and more willing to make changes quickly. Perhaps most importantly, decision-making groups were broadened out to include a wider variety of perspectives than they would have beforehand. New groups were created to report on specific issues brought to the fore by the pandemic, such as a group called the Resilient Curriculum Project team mentioned by P4, which included a wide membership. The COVID-19 crisis resulted in BLUE University recognizing different groups of stakeholders within the university and allowing them to contribute to key decision-making processes in light of their particular expertise. According to P4, it brought out to the fore people or teams within the university that had perhaps not had the chance to contribute to University decision-making and policy-making.

3.3.2 Internationalisation

Summary on three cases

Although it is too early to make a solid conclusion on how internationalisation has changed during the pandemic, there have been some common concerns and trends in the international activities of all three cases (in England only). Universities continue to invest in international recruitment and diversify their programme offers, including enhancing their IT infrastructure (e.g. various learning platforms and assessment tools) in order to provide new learning experiences and skill sets through blended learning courses, virtual

²¹ Researcher's comment: the increase in these meetings may be due to an independent review that found that staff members were unsatisfied with the level of communication by senior managers. It was also the case that PURPLE University encountered several problematic exposures in the media during the pandemic.

mobility and more in-country delivered TNE programmes or sandwich courses which were originally designed for students studying part of the course in the UK. Student's well-being, including international students at all levels, has become more important in their internationalisation strategies. Neo-nationalism was not mentioned in the interview data.

International research cooperation remains a high priority, internationally co-authored publications and projects are no less than pre-pandemic times despite the fact that research designs and methodologies must be changed due to restrictions of travels and field studies. However, there have been discussions on redefining success in international research activities.

In response to Brexit, there have been major changes to higher education and research internationalisation in the UK, for example the launch of the new Turing mobility scheme to replace participation in the Erasmus+ programme, and a potential "Plan B" alternative to association with Horizon Europe, the EU's Framework programme for Research and Innovation. The 'Global Britain' strategy has also been challenged by the geopolitical tension between the UK and China (e.g. the sovereignty of Hong Kong, the removal of Huawei equipment from the UK's 5G network, sanctions on Chinese officials over violations against Uyghurs).

National strategy

At the national level, the UK government (the Department of Education and the Department of Trade) in February 2021 launched an updated version of the International Education Strategy, which was introduced in 2019. The strategy sets a target to increase international students to 600,000 per year by 2030 (revenue of education exports to £35 billion)(Department for International Trade, 2019).

Surprisingly, despite all of the disruptions arising from the pandemic, the number of foreign students in UK universities grew by 12% in 2019/20 and surpassed a total enrolment of 500,000 for the first time ever to reach 556,625 (ICEF, 2021). This reporting period includes the first five months of the pandemic in 2020.

One of the measures is the new post-study work rights of two years for all international students and three years for PhD students (aka the ‘Graduate’ route) that took effect in summer 2021. Students affected by COVID-19 study disruptions, for example who have been unable to travel to UK campuses or who have been forced to study online or through blended learning – will remain eligible for the Graduate route provided that they eventually ‘arrive in the UK to complete one term’s face-to-face learning.’²² However, a member of the leadership at GREEN university commented that the government decision to reintroduce the work visa is to ensure the stability of the UK workforce (partly in response to Brexit), rather than for the direct benefit of higher education institutions.

At GREEN university, international student numbers have grown from 9,100 in 2014/15 to 13,445 in 2019/20. This represents a growth rate of 68% over the six-year period in comparison to 26% for the sector overall. Reviewing achievements in over a decade, an interviewee shared ‘in 2008, we had 1,700 international students. There was no overseas office, no Academic Partnership Unit, no Centre for Global Engagement and no Associate Deans for International in each Faculty. Today we are in the top five international higher education institution recruiters of overseas students in the UK – an astonishing success’. The below statistics show the total numbers of students enrolled at UK campuses of GREEN University in the last three years (2018-2021). These figures exclude the students studying on transnational education (TNE) at its partner institutions outside the UK.

Table 1: Student enrolments at GREEN University’s UK campuses 2018-2021

Academic year	Total UK students	Total Non-UK students	Grant total
2020/21	25,380	13,760 (EU: 3,800, Non-EU: 9,960)	39,145
2019/20	24,515	13,915 (EU: 4125, Non-EU: 9,790)	38,430
2018/19	22,410	12,560 (EU: 4,065, Non-EU: 8,495)	34,970

Source: HESA data²³

²² <https://www.ukcisa.org.uk/Information--Advice/Studying--living-in-the-UK/Coronavirus-COVID-19-19-info-for-international-students>, last accessed 28 July 2022

²³ <https://www.hesa.ac.uk/news/25-01-2022/sb262-higher-education-student-statistics/location>, last accessed 28 July 2022

The interviewee at GREEN university also acknowledged that there are significant challenges in recruiting international students in the years to come, especially in a post-Brexit and post-COVID-19 era. GREEN expects new models of education to develop and increasing global competition for students. GREEN university has been setting up and strengthening its regional Hubs and develop more TNE partnerships with blended learning offers in strategic world regions with priority towards Asia and Africa as the leadership views that by 2030, it's expected that 80 per cent of the world's (young) population will be in Asia and Africa according to the perspective of a senior leadership interviewee.

The figures of the academic year 2019/20 show GREEN was the UK's fifth²⁴ largest university for international recruitment for its UK campuses and the third largest provider of UK TNE degree globally, behind only the University of London and the Open University. Its investment in the TNE programmes continues to grow (Leadership Roadshow and internal report in September 2021). TNE student numbers have grown by 36% between 2014/15 and 2018/19 against a sector average of 0.4%. In 2019/2020, over 19,000 students study on TNE programmes offshore leading to GREEN university's degree qualifications (HESA, 2022).

In 2020/21, GREEN enrolled nearly 10,000 overseas students onto courses at its UK campuses, alongside an additional 4,000 students from the EU (the last academic year when EU students still pay home fees).

During the pandemic, virtual exchange or collaborative online international learning (COIL) activities have been expanded and even made a compulsory component of a range of degree programmes, and increasingly seen as an alternative modality to physical international mobility of students. A new and growing team of support staff to assist academics to set up COIL and use COIL as micro credential learning units with certificates and badges awarded to those who successfully completed them.

²⁴ behind UCL, Manchester, Edinburgh, and King's College London.

As for international research cooperation, GREEN has an ambition to achieve a top 300 global ranking through investing in international research. The tuition fee income has been supporting international research activities and implementing research enriched learning strategies. The research at GREEN is delivered together through a network of 8 research institutes (through merging 15 research centres previously), which employ nearly 600 research colleagues and have a thriving community of more than 800 postgraduate researchers (MRes and doctorate). Their research rating has increased from one to four stars in the QS Stars awards system in 2020, contributing to a five-star overall award for the university as a whole.

In the concrete term, GREEN has tripled the size of its REF 2021 submission against the previous REF in 2014. In total, 452 full-time research colleagues were submitted this year, compared to 153 in 2014, with 85% of those being new to the university since the last submission. 62.7% of research outputs are internationally co-authored, better than the Russell Group average of 60.2%.

Between 1 August 2020 and 31 July 2021, GREEN submitted 434 applications for research funding worth £127 million. In the same period, they received 118 new awards, 20 of which were from UK Research and Innovation (UKRI), the government's science and research funding agency, and 17 from the European Commission.

After a year where funding opportunities were limited, with UK budgets being cut and European programmes coming to an end or uncertainty due to Brexit, the interviewees also point to the challenges ahead of diversifying their research funding sources, from industrial partners and overseas governments through the partners.

One interviewee from the faculty of Health and Life Sciences commented that there was more funding available to them than their capacity to carry out the research and teaching which was made heavier during the pandemic due to a large increase in healthcare-related course enrolments. GREEN has built on its strength in healthcare courses to respond to the nation's need to produce more health professionals by changing the way it is training nurses, midwives and allied health professionals. With the extra funding from Health Education England (HEE), GREEN expanded the use of virtual simulated placements to help solve a growing recruitment crisis for the NHS as a result of the pandemic. As a

leading provider of nursing education in the UK, GREEN also works with the Burdett Trust for Nursing to launch a programme aiming to provide leadership training for 100,000 nurses and midwives from more than 150 countries by the end of 2022. It will have a significant impact, particularly in low and middle-income countries, supporting the development of the global health workforce and improving the health of people around the world (GREEN annual report 2019/20).

Behind all these successes, the interviewee also mentioned cases of staff suffering from burnout. The decisions tend to be made in a top-down approach.

Other interviewees mentioned that their research projects were postponed and part of the funds (e.g. research travels and dissemination events) must be returned to the funders, while PhD students received extension of scholarships or hardship support to complete their projects which were affected by the pandemic. One interviewee shared that at first the UK funders (research councils) did not provide any extension, but they later agreed to do so when other co-funders (including industrial and European funders) have offered additional funding to PhD students.

At PURPLE University, there was great concern expressed by P4 over the financial impact of the pandemic on the ability of international students to commence or continue their studies. These concerns are mirrored in the wider sector and have been extensively reported on in the media in the early days of the pandemic.

In actuality, international student numbers did not face a drop as some had feared. P4, who had contact with international students, expressed concerns over different aspects that may have affected international students' well-being, including isolation for those who studied exclusively online.

One respondent, P1, noted that the pandemic had actually improved the interest and enrolment among international students on the programme he had developed (which was developed and launched before the pandemic as a blended programme). The pandemic had increased acceptance and recognition among these students.

BLUE university

Two different dimensions of internationalisation came to the fore, namely teaching (related with mobility of students and staff) and research (joint research projects). One participant, P1, highlighted how the University's international research partnerships, and in particular international research engagement had probably been adversely impacted upon by COVID-19, because of the University's shift in emphasis on moving to teaching online. In terms of mobility, work placement mobility is paramount to the institution that prides itself on producing highly employable students who have the opportunity to work in a professional setting for a year as part of their degree. There has been a growing number of international work placement opportunities and their sustainability in the future is at risk, which implies work placement opportunities might be restricted to the UK in the future. In terms of the more traditional student exchange mobility, the situation changed radically. According to P2, students of the university were allowed to do a virtual mobility, meaning that they did not need to travel physically to the country their host institution was located in. There is a debate as to whether virtual mobility can equate to 'study abroad experience' if the student has never travelled. Interestingly, although BLUE University allows its students to take part in a virtual mobility, it does not allow incoming students the same opportunity, because BLUE University recognizes it does not offer a real holistic online offer. This could potentially be because of the relatively small size and relatively limited breadth of courses the University offers, although one participant narrowed it down to a lack of online courses around UK culture and skills development, crucial to broaden the student experience and integration of exchange students visiting the country for the first time.

One participant, P2, was very knowledgeable about the internationalisation activities and efforts of the University. This participant emphasised the great lengths towards which BLUE University had gone to in its efforts to enable some of its international students to attend the University. In particular, students from China had been targeted to enable these students to reach the UK at the height of the pandemic. The University, in collaboration with a consortium of other regional universities, took the decision to charter 36 planes in collaboration with a Chinese airliner to bring Chinese students directly into the UK, amounting to thousands of Chinese students coming in through this channel, at a time of strict travel restrictions for commercial airlines. BLUE University went out of its way to

provide a holistic package to these students, including airport pickup, quarantine accommodation, etc. Such a scheme was however not popular with local residents. BLUE University investigated whether the same scheme should be rolled out with India, but eventually commercial flight restrictions were lifted before the start of term. The considerable efforts and resources allocated to these plans demonstrate the extent to which these student markets are crucial to the financial sustainability of the institution. However, beyond the financial dimension of recruiting international students, whether these initiatives are compatible with an organisation's social and environmental goals is unclear and deserves further research.

3.3.3 Differences within the sector

GREEN university

Most of the interviewees stated that being a large university, GREEN has the advantage of having better resources and responding faster to the challenges of the pandemic.

For example, GREEN university invested in a new learning platform – Aula - that facilitated online learning and interactions between students before the pandemic. In 2018/2019 the university conducted a pilot phase (26 courses were transferred to Aula), 3 out of 4 students were satisfied with their learning experience. Subsequently, 1200 modules transferred to the new Aula platform within 3 months from March to June 2020. In September 2020, all courses were transferred to Aula for over 40,000 students (home and international).

Taking advantage of being a large university, GREEN library also negotiated bulk subscriptions for essential/compulsory books and textbooks with publishers to secure online access for individual UG students for the whole study programme (3 years) not only 1-week loan of online books. GREEN offers a new package called 'Flying Start' within which students receive these resources at no extra cost in their tuition fees.

What students receive will depend on their year of study, their interests and the requirements of their course. Each year a bespoke package for their course will be carefully chosen by the teaching team. This ranges from key reading materials, protective clothing (discipline-specific requirements), software and membership of professional bodies.

PURPLE university

Few respondents engaged with this issue. One respondent, P5, involved in a programme that relied heavily on local community partnerships mentioned that both PURPLE University and another nearby post-92 University acted in similar ways to care for students who had been affected by the pandemic.

There was a short commentary on how different kinds of universities (within the same geographic area) needed to work together to manage COVID-19 infections by giving consistent advice to students.

BLUE university

Few participants dwelled on this particular topic/ didn't emerge from the data. Apart from the 'asbestos legacy' of institutions from the 1960s (mentioned by P1), which is non-pandemic related.

3.3.4 Inequalities in the sector

GREEN university

Although the university has introduced a laptop loan scheme to students in need, there have been anecdotal examples of inequalities in access to online learning among students of GREEN University due to lack of broadband internet connection.

In terms of employment, there was a small percentage of staff on furlough scheme, but the university has so far managed to secure jobs and avoid redundancy by using financial reserves and other measures, such as voluntary early retirement, changing staff annual leave calendar. There was some restructuring of support services, such as the centre for global engagement, research support services, but there was insignificant job loss due to the pandemic. The university has in fact continued to recruit new staff during the pandemic.

The interview data did not show gender or ethnic inequalities at GREEN University as the direct consequence of the pandemic. However, academics had to work extra hours and suffered from serious burnout (e.g. at the Faculty of Health and Life Sciences). Additionally, staff in certain support service areas, had also been unfairly treated. For example, library and IT support services were the last to close and the first to open during the festive season even though the university has given six extra holidays to all staff. The academic writing centre had to provide more support remotely to students, especially international students in different time zones.

PURPLE university

One female respondent, P4, spoke at length about the various issues faced by women staff members at PURPLE University. Some of these issues were related to the pandemic, i.e. in terms of varying difficulties about the situations of persons working from home. However, this respondent spoke frequently about wider structural discrimination issues that seem to pre-date the pandemic. This respondent was professionally in promoting 'Equality, Diversity and Inclusion' issues at the University. She mentioned that there was some recognition of this and some (but incomplete) policies to address these inequalities.

BLUE university

Interviewees focused mostly on the precarity of the academic profession. Precarity in the academic profession was linked to institutional financial sustainability from the perspective of senior management (P1). According to P1, a voluntary exit scheme was set up and advertised to all staff, although it was more popular with the professional service staff rather than the academic staff. P1 was of the opinion that BLUE University had not gone beyond that. The same participant, mentioned that other UK universities, where the financial challenge was more acute, were discussing closing down courses or departments, especially in non-STEM subject areas. This was linked to the UK government's strong support for STEM subjects, which BLUE University is a strong provider of, and is characteristic of the institutional type it belongs to. However, from an academic perspective (P5, P6), at the receiving end of such policies, the view was not so positive. The impact of COVID-19 was perceived to have not only strong implications for current staff in terms of fulfilling their contractual obligations in order to pass probation (such as a contractually set target number of publications to publish and PhD students to attract, P6), but also future generations coming through the system, who might find an academic career less attractive, with P5 surprised by the lack of PhD applications in their field received during the pandemic, something that did not seem to resonate with the difficulties graduates were facing integrating the job market during the pandemic. Many more schemes or University driven schemes were highlighted, such as a freeze on new posts and fears from academic staff newly appointed to see their job offers rescinded (P5), on top of problems with human resources and employment contracts for staff based abroad (P5).

3.4 The purposes of higher education institutions in society

3.4.1 Summary

In comparison to the other two issue areas, there was relatively less discussion around the themes contained in this issue area. Where respondents commented on issues, there was a recognition that the general public were more aware of certain benefits provided through university research, professional training of key workers, and scientific expertise offered

by university researchers in official bodies advising government (e.g. UK Scientific Advisory Group for Emergencies / UK SAGE) as well in general public discourse (e.g. commentators in the media). There was an emphasis on the public response to the role of universities in producing medical and health related research as well as the training of doctors, nurses and other health professionals. Perhaps of note is that one of the widely used vaccines is based on UK university research (although the main university responsible for this was not included in the sample). These latter points were particularly relevant to the public perception of universities that had medical / health faculties.

3.4.2 Science

GREEN university

As our sample did not include members of the public, the data is mainly from perception of university staff. Most of them commented that the local community recognises the contribution of GREEN university not only for training qualified workforce in healthcare professions, but for other concrete activities during the pandemic, for example, the university has opened its labs for COVID-19 testing analysis, students and staff volunteers in the local hospitals, conducted research in collaboration with the local hospitals on the effects of COVID-19 on patients with vascular disease.

There were far more funding opportunities for research in healthcare-related areas than the staff of the Health and Life sciences Faculty can take on due to limited capacity.

The university has offered 50 fully funded PhD studentships designed to deliver research-led solutions to a range of global challenges posed by COVID-19 in the long term. These scholarships were open to British and international candidates.

PURPLE university

Many resources were redirected towards addressing health and pandemic related issues. Research laboratories continued to function when they were linked to COVID-19 research. Several academics at the University were involved in different scientific issues related to the resolution of the pandemic (and the related social issues). The senior manager in charge of the institutional response to COVID-19 [Researcher note: this person also works as a senior academic at the University's medical school] recognised

that the University and its scientific expertise were recognised as having contributed to the wider societal effort to address the pandemic.

BLUE university

Although a senior manager, P1, mentioned that they believed there had been a huge increase in the profile of academic expertise since the beginning of the pandemic, most notably through national committees like SAGE (Scientific Advisory Group for Emergencies) and NERVTAG (New and Emerging Respiratory Virus Threats Advisory group), most participants had an almost disabused perspective of public attitude towards academics as experts, in particular from the participants who were academics themselves (P5 and P6).

3.4.3 Education

GREEN university: New nursing degree programme

GREEN University is one of only seven institutions selected by Health Education England (HEE) – the national leadership organisation for education, training and workforce development for the NHS – to deliver the new Blended Learning Nursing Degree, which started in January 2021.

It was estimated that the university will train and support additional 2,700 students through to graduation and nurse registration over the five-year contract, helping to address the high number of vacancies in health and care settings in England.

PURPLE university

P3 stressed the role that the University played in the education of key workers. This respondent was directly involved in one of these programmes and outlined how they had to adapt their education delivery throughout the pandemic (the University allowed face to face sessions for educational activities for (future) key workers).

Other respondents - P1, P4, P5 - mentioned the changing ways that University delivered education and several claimed that the University had largely succeeded in rapidly adapting to the imposed restrictions.

3.4.4 Relations with society

GREEN university

Several interviewees asserted that although online teaching and learning will continue, it will not replace campus-based university life. The development of well-rounded students and university experience necessitate interactions and friendships that go beyond subject knowledge.

GREEN's strengths are lab-based courses and research projects that require advanced facilities (e.g. new batteries, cyber security, life sciences, and intelligence healthcare) which online activities can supplement but for which campus-based learning and research are essential.

PURPLE university

P2 at PURPLE University claimed it was a bit early to decide what the future of the campus was. However, most of the other respondents strongly believed that the University campus would continue to play an important role both for the delivery of education, the conduct of research and also for the well-being of the various members of the University community.

BLUE university

There have been extensive relations at local and regional levels. For example, through providing personal protective equipment (PPE) to the local hospital and the Technical Supports team providing anything they could to frontline NHS staff (P1, P2, P3). The University also offered residential accommodation, allowing the local hospital to move some of its doctors and other frontline staff (nurses, cleaning staff, etc) into university accommodation.

However, the University was also bringing in international students from countries perceived to be highly affected by the virus (China and potentially India), which also led to tensions with local resident groups who were worried about importing new variants of the virus from these countries.

3.5 The workings of higher education institutions

3.5.1 Summary

It was widely acknowledged in all three institutions that the initial transfer to an online or blended mode of delivery had caused a significant increase in the workload of all teaching staff, while also contributing to further potential anxiety and scrutiny within the academic profession, through the quasi-automatic video recording of all lectures for example, while also presenting challenging issues related to student and staff motivation during teaching activities. From a managerial perspective, the Churchillian adage according to which one should ‘never waste a good crisis’ was palpable, with many agreeing that there was potential to further increase online provision in the future, and to capitalise on the skills and experience acquired during the pandemic with regard to online delivery, and increase online provision. At management and operational level, a reorganisation and hierarchisation of the management structure took place, in particular at BLUE University, to deal with the day to day practical issues the University was facing in terms of responding to the pandemic. Few academics, if any (without an executive role) participated in these meetings.

3.5.2 Distance and online education

Before the pandemic, how widespread was digital teaching in the case study institutions and how has this changed during the pandemic? How did the role of teachers change in this process?

According to P2, BLUE University had a small online provision pre-pandemic. Throughout the pandemic it adapted its teaching and learning to offer a blended delivery model. It was felt that Blue University would retain some of that, while the view from management (P2) was that there needed to be further investment in the digital skills areas and the pedagogy development as an institution. According to P2, the University should capitalise on online learning provision, and that was probably a potential area of growth for Blue University. P4 was keen to stress that in the future they believed that digital capabilities would be embedded in professional frameworks, for example, Advance higher education and other related teaching fellowship schemes that are increasingly required of academics to secure appointments at UK universities.

3.5.3 Work of academics and support staff

GREEN university

Interviewees reflected on many challenges they face, for example, having to learn to record their lectures and changes the way they interact with students (e.g. break the usual lecture into small parts in different video clips, more meetings and pastoral care, one-to-one tutorials). Academics felt pressure of being very exposed in the video lectures. Although it is more accessible to students, the lecturers felt that their ‘errors’ may also be scrutinised.

Academics felt that the level of student engagement in online lectures is less than face-to-face teaching. Many academics have to deliver their lectures to a blank screen as students turn off their cameras.

Academics struggle with home schooling for their children and have to record their video lectures late at night.

*PURPLE university*²⁵

At PURPLE University three frontline academics were interviewed. All agreed that the workload increased during the pandemic but for slightly different reasons depending on the programmes that they taught on or supported.

In one case, teaching continued (in principle) ‘as usual’ for part of the pandemic due to the programme educating key workers (i.e. this was the UK’s government’s term to refer to workers carrying out ‘essential’ tasks and were thus exempted from certain guidance such as the requirement to work from home) but in practice because these programmes were so different from the way the rest of the university was operating, this added more complexity and uncertainty, especially given the changing government guidance. In another case, an academic on a programme with a large number of international students highlighted the increased workload related to a duty of care for students – especially international students, who felt isolated by their conditions. In the final case, an academic

²⁵ no support staff were interviewed at PURPLE University.

working on a blended programme saw increased demand, and thus increased workload, on his programme.

BLUE university

Academics (P5, P6) were unanimous in describing the challenges related to online teaching. In particular, both academics in different subject areas described what they felt was a very impersonal teaching experience, filled with a ‘sea of black boxes’ (P5) which made it very difficult for lecturers to understand if students were following or simply lost (because of the lack of visual cues), in particular when the topic being taught was rather technical, and a loss of the quality of the student experience, much of which was described as being ‘underground’ (P5). While the use of tools such as ‘Padlet’ was felt to be useful (P6), there was a feeling that students had started to veer towards communicating indirectly, in writing through these applications, rather than directly (orally) during a class. Finally, P6 mentioned how much the pandemic had influenced the structure or the delivery of their teaching, with pre-recorded sessions covering the theory content part, followed by live online sessions for activities. That academic very much wanted to use that delivery mode or structure in the future, post-pandemic.

From the perspective of the Library (P3), the central function played by the library was highlighted. This meant that it was the last part of the university to shut down, and although tensions between what the library staff wanted and what senior management wanted were played down, it transpired that the priorities of staff did not necessarily align with that of the students, and that senior management were keen to favour the student perspective and needs over the safety of their staff, regardless of a lack of good data or full information over the potential danger of the virus. Although not directly mentioned, there was an overall impression that the ‘show must go on’ and that some central services such as the library must stay open as much as possible, in the interest of students and the student experience.

3.5.4 Duty of care

How did interviewees perceive the universities’ role in caring for (domestic and international) students and staff? (e.g. safety, stress, motivation, involvement, responsibility)

At GREEN university a special COVID-19-taskforce was set up to look after mental health and wellbeing of students and staff, a pro-vice-chancellor was appointed to lead the taskforce. Regular (weekly) communication and a dedicated webpage ‘Connection matters’ was implemented throughout the pandemic. Online activities were offered (e.g. online yoga, counselling, coffee connections, etc.).

The university launched a new student-facing health and wellbeing initiative, Connections Matter, signposting internal and external resources focused on mental and physical health, as well as community opportunities and advice on studying remotely. Another example of support for students, especially international students was that GREEN university has refunded accommodation fees to students when they had to return home.

The university offers on-site COVID-19 testing at various buildings for students and staff (Lateral Flow COVID-19 test). The university also set up a Student Emergency Fund which provides financial support to students who find themselves in an unforeseen situation, leaving them without money for essentials. The university Welfare Fund has released more than £100,000 into the Student Emergency Fund and called for donations through different fundraising campaign to provide support students, for instance, direct funding for living costs, provision of laptop, emergency food parcels. Application for this emergency support has also been streamlined to ensure rapid response. Only small number of rotating staff were furloughed and for shorter period, mainly in supporting functions such as sport centres, catering, security.

The university has long been offering development opportunities for staff and their children, such as free MBA courses and doctorate with protected study time, 50% discounted UG tuition fees for staff children. In 2020 the university was named an accredited Social Mobility Employer as part of a nation-wide drive to improve social mobility in the UK. be officially recognised as a social mobility employer, confirming our dedication to going the extra mile to provide equal access and progress talent from all backgrounds.

PURPLE university

One respondent, P3, at PURPLE University who was part of the senior management team and also in charge of the institutional response to COVID-19 was clear that the University's first priority was the health and well-being of staff and students and that all decisions and policies would be made on this basis. He outlined the range of policies, services, events, resources, and activities that the university had put into place to support the community.

As above, another respondent claimed that the health and well-being of students had clearly been impacted and had resulted in an increased workload to academic performing a duty of care for students.

BLUE university

At BLUE university, one respondent responsible for curriculum design and learning development, P4, reflected on how hard they felt it had been for academics to carry on doing their jobs online, because of the multidimensional nature of the job, spanning teaching, research, service and citizenship, all which suddenly had to be delivered online, with the added anxiety and stress caused by the pandemic situation. The tripartite nature of the academic profession was felt to not easily be properly transposable in a short period of time to the online format, in particular because one its main components with regard to the teaching part, the focus on the duty of care academics feel towards their students, was perhaps more difficult to genuinely replicate online with such competing demands and such a difficult and uncertain context impacting all levels of life (eg., family, home) in such a short timeframe.

3.5.5 Governance and decision making

How did institutional governance and decision-making systems change through the pandemic (e.g. with the need to make quick decisions, protect institutional autonomy, hold meetings online). What effects is this having on shared governance? Are these changes likely to be permanent?

How did the case-study institutions deal with the data generated by using e-learning platforms - who owns the data and who has harvested it and how will it be used to transform higher education in the future?

PURPLE university

At PURPLE University, the issue of governance was discussed by two respondents – P2 and P3 - in terms of claiming to have been transparent in decision making regarding evolving policies and responses during the pandemic. [Researcher's note: Use of e-learning data was not discussed].

BLUE university

The University set a three-tiered emergency management structure (P1, P2). None of the academic staff seemed aware of this, which begs the question as to whether faculty and management work in silos even in periods of grave crisis. The strategic tier, known as the Gold Emergency Management Team, was chaired by the Vice-Chancellor and met when there was a crisis that needed to be dealt with. The Silver Emergency Management Team was chaired by the Chief Operating Officer, met once a week (and at times once a day) and was responsible for tactical responses (for example, if Public Health England wanted to set up a testing facility on campus then the Silver Emergency Management Team would go and look at appropriate venues) while the Bronze Emergency Management Teams were more the operational teams, for example an operational team was set up to support students self-isolating in halls of residence, another operational team was set up to collect student belongings during lockdown and reunite them with their owners, etc.

3.6 Conclusion and summary

The English higher education system is characterised by a high number of regulatory regimes overseeing the system as a whole and all institutions in the delivery of their mission(s) (e.g. the Research Excellence Framework, the Teaching Excellence Framework, the Office for Students). Performativity, financial sustainability, efficiency, customer service and return on investment are key concepts permeating decision-making in higher education institutions, regional and national governments in the UK, including

England. Cataclysmic events such as a global pandemic that have the potential to be disruptive and affect the financial sustainability of higher education institutions become management issues of the utmost importance. Since universities are organisations, and because of the advent of the corporate model in the English higher education system, these issues must be addressed at the institution-wide level, usually led by the senior management team.

To respond to the crisis effectively, our three case study universities have set up, on the one hand, specific COVID-19-response Task Force teams led by the Vice-Chancellor, and on the other hand, created relevant support webpages for staff and students, with a particular focus on support and well-being at BLUE, GREEN and PURPLE University. At BLUE University, a three-tiered emergency management structure emerged to deal with the crisis, although it appears not to have been well understood outside of the professional services workforce.

Governance and decision-making processes appear not to have been affected negatively by the move online, according to participants. Instead, positives were identified, including greater inclusivity, speed and agility, while the setting up of new groups to report on specific issues (such as the resilient curriculum) brought to the fore by the pandemic enabled for topics that had previously been ignored to be prioritised.

Student recruitment (national and in particular international) is at the core of decision-making within higher education institutions, because UK universities rely on tuition fees that represent a large portion of their total income. The focus on international students is overwhelming at the 3 UK universities we studied, and in the context of this study the ability for international students to commence or continue their studies was a major concern at all universities. This can be partly explained because international tuition fees remain uncapped, meaning UK higher education institutions can charge what they like for an international student enrolling at a UK university.

Domestic student tuition fees at undergraduate level are capped at £9,250 per annum, thus making England the most expensive public tertiary education system in Europe, even for domestic students. Furthermore, international student fees are usually between two to over three to four times that amount at many Russell Group universities, and many

postgraduate programmes charge even higher tuition fees. Such differentiated fees do not reflect the actual costs of degree provision and the surplus or profit on teaching international students helps fund crucial loss-making activities such as research, in essence enabling cross subsidisation across the institution. This focus on subsidising research activities through international tuition fees came across quite strongly at GREEN University, which is less research intensive than PURPLE and BLUE universities and seeks to increase its research capacity to enter the global top 300 universities (and in turn become an even more attractive proposition to more international students – a self-fulfilling prophecy fuelled by an increasing competitive higher education market relying on university rankings to establish a desirable hierarchy of places of study).

The **differentiated structure of tuition fees**, depending on geographical status, is therefore important to understand to fully absorb how UK universities reacted to the pandemic, a global event which disrupted travel and consequently international student mobility, because the UK tuition fee structure for international students has a much higher resemblance to that of US private universities than any European counterpart. UK universities also have higher ratios of international students and depend on these students to a higher degree than US institutions. This explains why international students, and any event impacting them or their ability to come and study in the UK, is of the utmost importance to UK universities. China is the largest sending country, and also the country where the first COVID-19 cases were reported. It is therefore not surprising that participants were acutely aware of this issue, and that the Chinese student recruitment market was critical. The ability for higher education providers to individually, or as group of universities, continue to educate this target group of students was a high priority at BLUE University, that joined a group of universities in the region in their efforts to fly in students from China directly on chartered planes, regardless of potential health risks for the local community. Purple University participants were also acutely aware of their institution's (and the sector more generally) overreliance on Chinese students, and conscious about reviewing different schools and departments' contribution to the University's overall finances, with a view to realign their size and shape towards the average proportion in universities in their peer group. Views on the matter were similar at GREEN University, where international students are a vitally important stream of incomes, in particular through tuition fees from international students who study on its UK campuses or in transnational education (TNE) programmes overseas.

Finally, **international research engagement** and **student exchange** were considered problematic, in particular at BLUE University, although at GREEN University Collaborative Online International Learning (COIL) activities had been expanded and even made a compulsory component of a variety of programmes, and increasingly seen as an alternative modality to physical international mobility of students.

English universities are highly differentiated in mission, profile, international focus, economic resources, academic selectivity and socioeconomic student mix. Because our study was limited to only three English universities our findings cannot be generalised to the sector level. Furthermore, because of the small numbers of academic and non-academic staff interviewed in each institution, and because of the sensitivity of the topic and risk of exposure of an institution's vulnerabilities, it cannot be guaranteed that participants relayed some of the most pressing issues their institution faced. However, the researchers were able to identify some common threads among their case studies, even though they each belong to a different type of institution (research intensive, research-led and post-92).

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Chapter 4 Finland

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In this chapter, we present the results of the Finnish pandemic study. Compared to many other countries included in this report, the Finnish higher education system is small: In 2021, there were approximately 310,000 undergraduate, graduate, and postgraduate students²⁷ studying in Finnish higher education institutions (Vipunen, 2022). Furthermore, the system is quite homogenous in a sense that it is mainly publicly funded. However, the dual system has different kinds of institutions: universities and universities of applied sciences (UAS), which have different missions, as well as their own legislation. In the report, we refer to the first set of institutions as universities and the latter as UAS.

At the start of 2022, there are 14 universities and 24 UAS in Finland. Of the universities, 13 operate under the Ministry of Education and Culture, and one under the Ministry of Defence. Of the UAS, 22 operate under the Ministry of Education and Culture; one under the Ministry of the Interior, and one is maintained by the regional government of the Åland Islands. The universities and UAS may operate under different legal basis — universities either as corporations under public law or as foundations, and the UAS as public limited companies, both receiving their public core funding with nationally set criteria. The difference between the two sectors in funding reflects their different roles in education, research, and societal tasks. The UAS grant Bachelor's and Master's degrees; the universities do the same but they also grant doctoral degrees. Some mergers have taken place within recent years across the university and UAS sectors; additionally, the UASs have increased their R&I activities, further blurring the divide between the two sectors. Of the universities' core funding, 42 per cent is based on their education outputs, 34 per cent on research outputs, and 24 per cent on strategic tasks and specific national duties. The UAS, in turn, receive most (76 %) of their core funding based on their education outputs, 19 % on the basis of research and development, and 5 % on the basis of strategic tasks. In comparison with other European countries, the Finnish higher education funding system is exceptionally heavily based on competitive and productivity-

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²⁷ In this number, both students who were registered as "present" and "absent" in semester of Autumn 2021 are included.

based indicators (Seuri & Vartiainen 2018). In addition to core budget funding, both universities and UAS receive external (competitive) funding from various public and private sources.

To generate the data for our study, we interviewed 12 higher education actors. Ten of them came from two different institutions—one university and one university of applied sciences. Two remaining interviewees were national, system-wide actors. All interviews were conducted in November and December 2021. We tailored the interview questions for each interviewee individually, choosing them from questions provided by the coordinators of this report. All interviews were recorded and analysed deductively based on the three wider themes of this report. During the course of the study, we followed the research ethical guidelines of the University of Jyväskylä. Additionally, we used some newspaper articles and opinion pieces to provide some examples of the initiatives and insights regarding research and the pandemic that have taken place in Finland within the recent years.

The chapter is organised as follows: In section 1 we introduce the participants as well as the basic country facts and the timeline of the pandemic in Finland specifically. In section 2 we present the results of our analysis, and finally in section 3 conclude our findings.

4.1 Overview of research conducted

4.1.1 List of interviewees

National system-wide actors	Participant 1: A union representative Participant 2: A representative from the Ministry of Education and Culture	
	Case 1	Case 2
Type of institution	A public, mid-sized multidisciplinary university	A public, large multidisciplinary university of applied sciences
Number of interviews	5	5
Top leadership	Participant 3: Top leadership	Participant 4: Top leadership
Middle leadership	Participant 5: Director position	Participant 6: Director position

Administrative staff	Participant 7: Head position	Participant 8: Head position
Academics	Participant 9: Lecturer	Participant 10: Lecturer
Students	Participant 11: Doctoral researcher	Participant 12: Bachelor student
Other data	Selected pieces of news and other media texts were used in some parts of the report to complement the interviewees' views and to provide examples of the ongoing research and pandemic-related discussion in Finland.	

4.2 Country profile

4.2.1 Basic facts about Finland

Population (2021)	5,549,599 (Statistics Finland)
Unemployment (2021)	7,7% (statistics Finland)
GDP per capita in PPS (2020)	115 (Eurostat)
COVID-19 caused GDP drop in Q2 2020	-4,5%
Gini (2020)	27,3 (World Bank)
Human Development Index (2019)	0,938 (11) (undp.org)
Government form	Unitary parliamentary republic
Political orientation of the current government	Coalition government: Prime Minister's party Social Democratic Party; with Centre Party, Green League, Left Alliance and Swedish People's Party

4.2.2 Characteristics of the Finnish higher education system

Population of students (2021)	312,834 (the Vipunen database)
Tertiary education attainment (2020)	44,7% (OECD; age group: 25-34)
Student-academic staff ratio in tertiary education (2018)	15,3 (Eurostat)
Number of higher education institutions (2022)	38
Public spending on tertiary education as % of GDP (2017)	1,6552% (World Bank)
Fees	See Eurydice Report 2020/2021 (p. 78)
International students (% of total) (2018)	8,1% (OECD)
Main international student origin countries	Russia, Vietnam, China, Nepal, India (degree students; National Board of Education)
Number of Institutions in ARWU 2020 Top500	3

4.2.3 The Pandemic in Finland – overview and timeline

In Finland, COVID-19 cases began spreading rapidly in early March 2020, which began the 1st wave of the pandemic in Finland. The second wave happened around September–November 2020, the third wave in February–April, 2021, and the fourth wave at the turn of 2021 and 2022.

The strictest measures against spreading cases were enacted in Spring 2020, when the Emergency Powers Act was introduced from March 17th 2020 to June 15th, 2020. All large gatherings were forbidden, all schools were in distance mode, and there were extensive travel restrictions. Since then, there has been no renewal of the Emergency Powers Act, but different localised measures were in place, depending on the number of cases. These measures included different types of quarantines and isolation, closing down restaurants, pubs, and other public places, travel restrictions, recommendations regarding social distancing, masks, and hygiene, as well as economic support to businesses. After the first national lockdown in spring 2020, regional authorities have been responsible for setting restrictions. There was also a strong emphasis on testing and tracking, especially at the start of the pandemic.

Regarding universities specifically, most universities have remained in distance mode until the beginning of March 2022, although there has been some in-person teaching as well, especially with the first-year students and in more practical fields, such as health care.

As of February 2022, there were around 582,000 confirmed COVID-19 cases and approximately 2,200 COVID-19 deaths in Finland. 86% of the population had received at least two doses of COVID-19 vaccine.

4.3 Sustainability of higher education systems

4.3.1 Policy and funding priorities

The interviewees did not address funding issues to a great extent. This may be due to the Finnish higher education funding system which is heavily based on public funding rather than private income in the form of, for instance, student fees. There was mainly discussion on research and innovation funding, which was considered more important in the pandemic conditions than ever before, considering, for example, the UN Sustainable Development Goals, which have been adopted in Finnish higher education institutions. One of the interviewees considered the dual funding model especially problematic, as universities of applied sciences receive significantly less funding than universities, as they are not focused on research.

Even though funding was not discussed as extensively as some other topics, it was pointed out that many of the problems that exist in current academic and teaching work can, in fact, be traced back to the higher education institution funding cuts made in Finland within the past decade (see e.g. Seuri & Vartiainen, 2018). As the pandemic has continued, teaching staff has been stretched very thin because there simply is not enough staff to do all the work. When teachers had to make major adjustments to their teaching, there were no extra resources to accommodate those additional efforts. Teachers had to use their own time, which meant abnormally long working hours for many, for a long period of time:

One thing which has now clarified, is the lack of funding which has been going on ever since 2008 when educational funding cuts started. There is less and less time for everything because job tasks that used to have someone to do them have now been distributed to different individuals. This kind of a system is very vulnerable, because in a special situation like this people are required to be unreasonably flexible. [...] And the lack of resources affects everything. For example, our UAS has great faculty training opportunities, but no one has time for them. (Participant 10, UAS lecturer, translated from Finnish).

The union interviewee commented that this highlights the need to rethink teaching load definitions in the future collective agreements. Decreasing resources were also seen

problematic in terms of increasing intake of students by individual institutions, which in turn, means less research as scarce resources have to be directed to teaching.

Only one interviewee mentioned additional COVID-19-related funding for higher education. There is emerging evidence that, in the short term, the financial situation of Finnish higher education institutions has not deteriorated and has, in some cases, actually improved because of extra funding. Several policy measures have increased funding on the short term either in form of additional COVID-19-related funding, or by redirecting existing funding. Examples of these are an extra intake of students and fast-tracked research funding for COVID-19-related research. In addition, the planned austerity measures have been postponed to post-COVID-19 era (Kivistö & Kohtamäki, 2022).

4.3.2 Internationalisation

Already before the pandemic, internationalisation was widely discussed within Finnish higher education, as it has been considered important in terms of competitiveness as well as attracting highly-skilled (general) workforce to the country. Early-career mobility especially has been encouraged: research visits abroad, presenting at international conferences, and attracting international students to study in Finland have all been on the agenda for years. One top-level university interviewee also approached internationalisation from the perspective of competitiveness, finding the lockdowns detrimental to the visibility of Finnish research and recruitment of international (early-career) staff. Another interviewee, on the other hand, considered the Talent Boost programme (Ministry of Economic Affairs and Employment of Finland. n.d) discourse problematic, as well as the fact that while international student integration has typically been seen as solely universities' responsibility, research points to the role of the labour market and the family situations in integration (see Mathies & Karhunen, 2021).

As a result of the pandemic, internationalisation, in its traditional sense of physical mobility stopped almost entirely, which is of course not unique to Finland. In-person conferences switched to online conferences, and research visits abroad were cancelled or postponed. However, some institutions kept sending their students abroad to do exchanges despite the pandemic. In Finland, the situation of international students was considered difficult, as they were forced to stay home and study online, like elsewhere in

the world. According to one interviewee, internationalisation was also left out of political focus for a while. Also new challenges emerged: how to, for example, design degree programmes that need to be launched fully online due to students being abroad? Additionally, the question of prioritising emerged:

If we think about student mobility, of course we can now think about the possibilities that digitalisation brings to it – how can we implement virtual mobility in a more planned way and what could we do in terms of sustainability that we didn't do before, such as the “green Erasmus”. And of course, the questions of immigration are big, which the pandemic has modified – who should Finland and Finnish higher education prioritise if we only have a specific number of people who can enter during the pandemic. Should it be exchange students and other short-term mobility, degree students, or researchers coming to Finland? In the end, it's a question of what kind of mobility the higher education institutions value the most. (P7, Head position, translated from Finnish).

Despite many negative effects and challenges, there were also positive effects to ‘everyone going online’. Interviewees also thought that in the future ‘mobility’ might increasingly mean mobility online, both in terms of research visits and conferences. It was argued that mobility requirements (for example in funding applications) should be changed, so that they would also take online mobility into account; this was also presented as an equity goal. It was also brought up that flying around the world to attend a single conference can no longer be ‘the default’, as it is not sustainable.

I think that during the pandemic we've realised how you can create connections and initiative collaboration without having to travel anywhere. I went to conferences for the first time in 2019 so that there were about 4-5 flights in total. I felt anxious and disgusted – that I had a feeling that I “have to go there” so that I can get that one magical experience, to meet that one person with whom there's a connection. [...] Overall, the idea that we are flying around the world and look for these very rare chances that lead to something, I really want to question that. (P11, Doctoral Researcher, translated from Finnish)

On the other hand, interviewees agreed that online environments are not as good in terms of networking as offline interactions. Physical mobility was also considered to be particularly important for students doing exchanges—otherwise it would be difficult to get the full experience of doing one.

Regarding international scholars in Finland more generally, there has been vibrant discussion on how to make international students stay after they have obtained their degree. As Mathies and Karhunen (2021) have shown, retention is dependent not only on measures addressed to the students themselves, but also their families and the labour market. Furthermore, if Finnish universities keep becoming more diverse, rethinking needs to be done in terms of work culture and collaboration, as well as universities' language policies:

And something I've also been interested in [already before the pandemic] is the role of internationalisation in terms of local languages and “Finnish-ness”, and what internationalisation does to our understanding of national languages, their vitality and future, which is not a minor question at all. (P6, Director, translated from Finnish)

Overall, there has been quite a bit of public media discussion on the language of publishing in Finland, usually including concerns that Finnish is declining as a ‘language of science’, even though there is little research-based evidence that this would be the case (for a critical discussion, see Saarinen 2020). However, increasing use of English in international publishing may be marginalizing the second national language of Finland, Swedish, as well as other languages (on ‘epistemic monolingualism’, see Kuteeva, 2020). Finally, it should be noted that there are also some interesting projects to support multilingual publishing, such as the Helsinki Initiative on Multilingualism in Scholarly Communication set up in 2019.

4.3.3 Differences and (in)equalities within the sector

Looking at the Finnish higher education system as a whole, no differences within system emerged from the interviews, except for the critique towards the dual system from one UAS interviewee and the resulting, unequal funding model, which has not changed as a

result of the pandemic. It was also pointed out that very practical fields (which are typically found in the universities of applied sciences), such as health care and cultural industries, had a more challenging time switching from offline to online teaching, and some of the teaching remained offline altogether. In terms of (in)equalities, there were no general tendencies to be found in the interviews either. However, different groups were mentioned by different individuals: early-career researchers (ECRs), female scholars, older teachers, students, as well as administrators (called ‘other staff’ as opposed to ‘teaching and research staff’).

First, the situation of ECRs and female scholars was considered particularly tricky. For example, ECRs normally have some mobility requirements when applying for funding in Finland²⁸, and these requirements might have been difficult or impossible to fulfil during the pandemic. Also, caregiver duties were mentioned as a possible problem for women especially. Another group that was mentioned were teachers at the end of their careers, who might have been teaching offline for perhaps even decades, which is why the sudden transition to online teaching might have been particularly tough on them:

We have one person in our team who’s about to retire soon, and they said at the start that they feel quite anxious about all this, that they were already quite overwhelmed with work before. But I think they’ve managed to do very well in the end after they first got some help. (Participant 10, UAS lecturer, translated from Finnish).

Interviewees did report some positive surprises here as well, however. Regarding students, one of the interviewed lecturers argued that switching to online teaching did not *cause* some students struggle and others to thrive but instead *exacerbated* existing differences between students. They also noted that some students who had done poorly with offline presentations before were now doing better online, and vice versa. The challenges of international students were also brought up, as it might have been particularly difficult for them to stay at home without being able to create friendships in a strange country.

²⁸ In February 2022, Academy of Finland announced it is planning to change early-career funding models and to remove the mobility requirement altogether. The change is planned to be implemented from autumn 2022.

Finally, the university actors brought up the problems between the two categories of staff in Finnish universities, ‘research and teaching staff’ and ‘other staff’. These groups have different salary systems and working hours, so for example research and teaching staff can work without having to clock in in the morning and when leaving the office, whereas ‘other staff’ has to report their work hours more rigidly. In other words, there has been no similar trust towards these groups in the past. During the pandemic, however, it has become clear that any knowledge worker, whether an administrator or a researcher, can work from home and that people do their work as well as (or better than) they would while sitting in an office from nine to five:

This has already been the case for academics before, but now also for the rest of the university staff: the trust has increased. Trust towards the fact that people do their job, and they do it well, even though they weren't constantly monitored through an access control system. In fact, usually people do their job better, more efficiently, and with more commitment [when not restricted]. This doesn't just apply to universities. But if I think about the university services, at the beginning [of the pandemic] it was ridiculous when they had to somehow report where they are, what they do, and when. Luckily, this practice was abolished quickly. So, there should be trust towards people doing their work properly. When we give people agency and autonomy, usually it only produces good results. (Participant 10, University Lecturer, translated from Finnish).

4.4 The purposes of higher education institutions in society

4.4.1 Science

Among the interviewees, universities were considered ‘irreplaceable’ as institutions of knowledge production and innovation and in terms of the competitiveness of the Finnish society in general, even though there was pessimism in relation to current resources. Similarly, the UAS were seen important in their research and development work. The aim

of Finnish higher education institutions was considered to be utilising and producing research knowledge that is needed to develop society, combining pieces of research to be used for development, and connecting research to teaching.

Its [higher education institutions'] importance is huge. Finnish success can only be based on know-how, it cannot be overestimated, it is completely fundamental for Finnish competitiveness, but whether those goals of share of higher educated population are realistic in this situation, I'm afraid it's another question
(Participant 3, University top leadership, translated from Finnish)

Looking at the role of students and early-career researchers specifically, their role was considered to be important in terms of building the research community. As one of the lecturers put it, 'today's students will be my colleagues one day'. ECRs were also considered to have a particularly important role within departments: to provide some new thoughts and questions and question the existing structure and ways of thinking.

However, as two interviewees pointed out, the pandemic might be detrimental to the Finnish research community in the long run when creative chance meetings and connections are hampered by not being physically present at campus as much as pre-pandemic.

... In 2020 all universities' publishing activities really picked up from the earlier, but if this continues, at least based on what I have talked about with researchers, this will paralyze creativity as there are no contacts [between researchers]
(Participant 3, university top leadership, translated from Finnish)

Looking at the media, critical discussions have taken place during the pandemic about the societal role and 'usability' or 'usefulness' of research. While it is difficult to say whether these are COVID-19 related or part of a larger societal debate about the role of research and research knowledge, they still occupied media space for some months in spring 2021. This was at least partly due to the year 2021 having been designated as 'the Year of Research-Based Knowledge'²⁹ by the Ministry of Education and Culture, the Academy

²⁹ In Finnish: "Tutkitun tiedon teemavuosi" (Tieto, Tutkittu 2021)

of Finland, and the Federation of Finnish Learned Societies (Tutkitun tiedon teemavuosi 2021). During 2021, the role of research in society was thus present in many public events and activities.

4.4.2 Education

In addition to their essential role as knowledge producers, the purpose of higher education institutions was also connected to the development of teaching. University teachers were considered as enablers of building knowledge, developers of expertise, educators of highly qualified experts in one's fields, and 'student guides'. Here, it should be pointed out that in Finland, the teaching profession is highly respected (see Sahlberg, 2011 and, for critical discussion, Punakallio & Dervin, 2015), and usually one of the most popular degree programmes for university applicants.

On the one hand, the pandemic was seen as a possibility to finalise the 'digital leap' that had been planned and prepared for some time already before the pandemic. On the other hand, some interviewees stated that the digital leap also made problems with digital pedagogies more visible and accentuated the need to rethink pedagogies, and the related collective agreements on teaching. The union interviewee, for example, mentioned the immediate workload of transitioning to digital teaching, as well as the discrepancies between the old collective agreements' definitions and the new pedagogical demands of what counts as 'teaching hours'.

*I hope we have moved on from the discussions whether teaching is only seen as lecturing in front of a group towards a more multimodal understanding. So, I hope this [situation] has finally woken up the last conservative actors in the field ... so that if we talk about teaching where someone *gives* someone something, then maybe we should talk more about learning process, supervision, support. [...]*
(Participant 1, Union representative, translated from Finnish)

In the spring of 2020, university and UAS entrance exams³⁰ were arranged in pandemic lockdown conditions on campus, which is why the number of applicants allowed

³⁰ In Finland, university and UAS students are selected based on their matriculation examination scores or an entrance exam. See more at: <https://www.studyinfinland.fi/admissions>

physically in the exams needed to be cut in order to avoid physical contact. Consequently, entrance requirements were changed in the middle of the process, as scores given based on the Finnish matriculation examination³¹ were given more weight at the expense of the entrance exam scores. This resulted in several complaints to the Parliament Ombudsman, who ruled that the sudden procedure was legal in the exceptional circumstances (EOAK/2628/20020). It should also be noted that such a change towards giving more weight for the matriculation examination over a separate entrance exam had already been discussed before the pandemic.

4.4.3 Labour market

Considering the issue of labour market and skill needs of the future, the interviewees brought up a variety of issues from the perspective of their own field or position. The interviewees who worked at a university of applied sciences, for example, had noticed an interesting phenomenon which did not exist before the pandemic. There were requests from different businesses regarding whether their employees could participate in different kinds of interdisciplinary projects that were ongoing at the university. Overall, the emphasis on wellbeing was thought to have increased, and questions of how to combine wellbeing and work have been widely discussed in the UAS case institution. The UAS lecturer also contemplated that mastering different online tools will be increasingly important, as well as having different kinds of meta skills, such as dealing with stress and managing one's time.

Looking at the universities and early-career researchers specifically, the doctoral researcher interviewee pointed out that there is still quite a wide-spread image in Finnish society of doctorate holders being highly theoretically oriented and 'not knowing anything about practice' – researchers being people who sit alone in their offices thinking about grand theories. Indeed, there has been some evidence that having a doctoral degree is at least *perceived* to be a hindrance in job searches (see Rantala, 2010), especially for those graduated from STEM fields. However, there is no recent research-based evidence on how the situation is today.

³¹ <https://www.ylioppilastutkinto.fi/en/>

4.4.4 Relations with society

Higher education institutions were considered to have a strong societal relevance by the interviewees, the argument being that because they are funded by taxes, the larger society has right to expect relevant activities. However, especially for the university of applied sciences, their main purpose was questioned due to them being public limited companies by one of the interviewees: is it to make profit or is the social responsibility more important? The first was considered problematic in terms of higher education's civic role. In a wider perspective, the potential polarization of the society as a consequence of the pandemic and other crises was seen as a potential threat, and the role of cooperative activities between higher education institutions and the larger society important:

The ethos of collaborative development fits well the profile of a UAS, as we don't do basic research like, I mean we do also have researchers, but not like at universities, so I think it is important that we can do things together [with other actors in the society] [...] and of course it is scary that if the society starts to close up more, and people start envisioning more threats, that this polarization, the existence of extreme phenomena in society strengthens... (participant 4, UAS top leadership, translated from Finnish)

Looking at public discussion of research, in recent months there were some social media attacks directed towards researchers, based on the publicised funding decisions by the Academy of Finland. Picking on individual titles of projects (in particular on controversial or highly theoretical topics on humanities and social sciences), some publicly argued that a specific kind of research is 'useless' and 'not worth funding'. This, in turn, raised a counter movement #MinaTutkin (#IDoResearch) on Twitter, where Finnish researchers shared their research topics publicly (see Thornton, 2021). However, as one interviewee phrased:

It probably depends who you ask, but I'd still like to think that despite of these somewhat colourful conversations which have been going on in the public within recent years, despite of them, high quality education and high education level which is based on research is still appreciated. Yes, we've had funding cuts, but I think the entire idea of Finland, or some kind of a "country brand" that most

people on the street would probably confirm is the fact that Finland is known to have a good education system. However, I do acknowledge that there are those who disagree, and their voices are probably louder now thanks to social media.
(P7, Head position, translated from Finnish).

Another example of a heightened awareness of the research/society relationship are the Council of State COVID-19 reviews³². The Prime Minister's Office provides reviews and meta-analyses of COVID-19 related research every three months for the use of decision makers.

4.5 The workings of higher education institutions

4.5.1 Distance and online education

In Finland, there was a rather rapid switch to online education. The 'digital leap', which was also mentioned earlier in the report, had been discussed for a long time. There was a lot of expertise and interest in digital learning, but in March 2020 the entire higher education sector was forced to take this leap. The skill level with online education and appropriate tools varied extensively between teachers: some had existing experience with online teaching, Zoom, or Teams, whereas others had none. In some fields, the switch to online teaching was also a lot more challenging than in others (e.g. medicine and health care).

Despite these differences, it was agreed by the participants that the transition to online teaching was somewhat smooth, and teachers and administrators worked hard to make everything work.

There were several issues which contributed to the smooth transition: existing infrastructure (the internet connections being good almost in the entire country); the positive attitudes of Finnish teachers (and students) towards digitalisation in general. One interviewee suspected that the 'Nokia heritage' might have something to do with such attitudes:

³² <https://valtioneuvosto.fi/tietoa-koronaviruksesta/tutkimuskatsaukset>

Well, if we think about this from a wider perspective, I think what we can see here is the high educational level of the Finnish society, independent of the field. Even though there is inequality – maybe more now than before – everyone has access to higher education, especially if you compare to other countries. Then, if you think about the Finnish industry and what is exported, I wonder what the significance of technology industries is, maybe it plays a role. For example, my generation entered work life during a time when Nokia was strong, when the Internet came, when email came, so I wonder if all that has played a role, compared to societies where this kind of level of education and acquisition of skills is not available for everyone. (P9, University lecturer, translated from Finnish).

Another reason that some interviewees suspected to be behind the ‘smoothness’ were – perhaps quite stereotypical – characteristics that are usually attached to Finns: them being introverts more often than extroverts (which makes staying at home quite nice); the Finnish *sisu* (persistence, grit) and the ‘Winter war’ mentality (referring to the 1939-1940 war between Finland and the Soviet Union), meaning that people will manage whatever difficult situation as long as they stick together and work hard towards the end goal. This, however, was not considered only a positive issue:

What the pandemic has shown about Finnish higher education, or about Finnish work life in general, perhaps also in a bad way, is the Finnish persistence, that things will get done no matter what. On the one hand, Finns can be proud of that. On the other hand, this led to completely inhumane workdays which probably wouldn't have happened if we had kept working offline. So, if you have meetings one after the other, there are no breaks and you just stare at a screen all day, and everyone is saying that this makes no sense, but no one did anything about it. It just kept going. I personally connect this to Finnish work ethics, that “let's be the working heroes”, “I will manage even though my neck hurts and I cannot even see anything anymore, I can still do the final meeting”. [...] And this is a collective illusion that we somehow created together. (P6, Director, translated from Finnish).

Examining the early months of COVID-19, the first spring of the pandemic was considered quite difficult but successful, considering the circumstances. The interviewed lecturers and students reported that almost no classes were cancelled in the case institutions in the end, for example. In fact, distance work, learning, and teaching were considered as an acceptable alternative to offline work, except for people who had children who stayed at home during the first spring of the pandemic. Generally, the case higher education institutions have offered quite a bit of support for IT challenges, even though IT services have also been stretched thin in terms of resources. Teachers also relied on peer support, and eventually they managed to make things work through trial and error.

There was also quite a lot of discussion on different online teaching tools in the case study higher education institutions, and in most places, they ended up being either Zoom or Teams. Also asynchronous tools, such as Moodle and university Intranet were used, as they had been used before the pandemic as well. Questions of data protection were also widely discussed in both case study institutions:

There was a lot of shared discussion on what online platforms there are available, so it was mapped out, what do we know about them, how people's experiences on them are. Zoom was a potential option from the very beginning, so it was decided quite soon, and it also was then recommended by the university, also because it was considered to be safe from the data protection viewpoint. And then Teams came as a 2nd option later. Then there was also discussion what these platforms mean for research: How can one store data in a safe way, who has the right to access different things, when should we use the university network and so on. And there was discussion happening on all levels: departmental, faculty, and university-level. (P9, University Lecturer, translated from Finnish)

Based on the interviews of the students and lecturers, for some undergraduate students online learning seemed to work even better than offline learning. Some challenges also emerged, however. Especially in degree programmes where group work played a big role, online work was sometimes difficult to carry out:

Well, our programme is very group work heavy, and for that I don't think online mode is the best, because you do need this kind of contact and support by your peers, and that's more difficult to do online. During spring 2020 there was some kind of group work in every course. If there were days with lectures only, then online was ok but with group work it didn't work as well. (P12, Bachelor student, translate from Finnish).

For postgraduate students, in turn, everyone being online created more equality, as online participation options were quite limited before the pandemic. Generally, the interviewees hoped that in the future it would be possible to organise meetings, webinars, and other small events online, rather than offline. Hybrid options were also viewed positively, though it was acknowledged that they cause extra work for the teacher, as well as extra IT resources.

Regarding the future, there were some questions raised regarding the online/offline distinction: lecturers hoped that the lessons that have been learned from the online experiences would make people question in the future whether 'offline is always better', because it might not be. Therefore, teachers should carefully consider the format of teaching, and collective agreements should allow for a versatile understanding of teaching.

4.5.2 Work of academics and support staff

Prolonged distance work was suspected to have an effect on research creativity in unexpected ways. For example, one interviewee was asking what is going to happen with data collection, research ideas, and brainstorming, if researchers keep working from home. It was also asked what kind of skills 'distance leaders' (heads of departments, deans, rectors, etc.) will need in the future. Furthermore, more cooperation between universities was suggested.

Overall, many interviewees stated that the way they were now working was not sustainable in the long run: having several zoom meetings per day without breaks was perceived as too much for them, even though many also said that they enjoyed the fact that they could now flexibly choose when and where to work:

I've been commuting for years now and have many commuter friends, so we've been discussing that employers seem to have a very different approach to distance work. I've never even thought I have to apply for a special permission to do distance work because it's been going smoothly for so many years. My former supervisor told me that they don't care where I do my work as long as the work gets done. Rather than working less from home, I'd say that there's actually a risk of working too much. I work better when there's no distraction. We no longer have our own offices at campus, just large open spaces. I enjoy going to campus every now and then, to meet colleagues and students, but it depends on the individual. So I hope that individual needs and preferences would be taken into account when thinking about knowledge work. (Participant 10, UAS lecturer, translated from Finnish).

The previously unequal access to distance work was also a topic in some interviews. Academic (teaching and research) staff has had more flexibility in choosing to work from home or outside the university premises than support staff, and this has also been interpreted as a question of trust, as was pointed out in Section 2.1.3 as well. Now, more equal practises exist for this.

4.5.3 Duty of care

While many other interview themes and questions produced a variety of responses among the interviewees, one concern was shared by everyone: the prolonged pandemic has taken its toll on academics everywhere in terms of wellbeing and mental health, even though some had coped better than others, and even published more than pre-pandemic (for global figures, see Else, 2020).

Case higher education institutions and individual academics responded to wellbeing challenges in various ways. Institutions sent surveys to their students and staff, asking about wellbeing related issues. The institutions also organised different kinds of virtual events and, in the case university, remembered their staff with a Christmas meal that was home-delivered, for example. In the case UAS, all students were contacted either by phone, SMS, or email – a gesture appreciated widely by the students. Generally, it was

thought that the institutions did ‘the best they could’ given the challenging circumstances, but there was also a feeling that, in retrospect, total lockdowns may have been detrimental to the wellbeing of students and staff:

The idea [of gathering information about pandemic experiences] probably was that if something similar takes place again, and we think about student wellbeing, which correlates with their study outputs and study success, what could we learn from this? Was a total lockdown a reasonable solution in the end? (Participant 4, UAS top leadership, translated from Finnish).

What had helped many participants were different venues of peer support – sharing good practices with colleagues, going on ‘socially-distanced walks’, and making sure everyone was doing fine. One lecturer also pointed out that small degree programmes with fewer students were a blessing, as the teachers were already quite close with the students and were able to make sure everyone was doing well and not getting lost, even though they did not meet on campus regularly anymore. In a sense, focusing on wellbeing was also not necessarily a new type of thinking, as some higher education institutions had already adopted wellbeing as part of their strategy before the pandemic. However, during the pandemic it got a new, strengthened meaning.

Regarding doctoral supervision, the doctoral researcher interviewee thought that it would be good if supervision also included an affective aspect instead of supervision focusing solely on thesis writing and work-related matters. Community-building at the early stages of one’s doctoral journey was considered important as well, as no one automatically knows how to do a PhD or what it entails when they enter a PhD programme (see also Aarnikoivu, 2020). Furthermore, different kinds of communities might prove invaluable during crises like COVID-19 (Brankovic & Aarnikoivu, 2021).

4.5.4 Governance and decision making

Generally, the interviewees seemed satisfied with the governance and decision-making related to higher education during the pandemic, although some said that in retrospect,

the need for halting all physical campus activities in spring 2020 might have been exaggerated.

However, decisions were made quickly: Universities, the UASs, and their national umbrella associations Unifi (Unifi, n.d.) and Arene (Arene, n.d.) quickly set up working groups, working on different pandemic scenarios and the required activities for different scenarios.

Nationally, I think that the state actors, the government have succeeded relatively well [...] looking at higher education institutions, we've had close dialogue with the Ministry of Education and Culture, Ministry of Social Affairs and Health, and the Finnish Institute for Health and Welfare, this strategic level corona crisis management in higher education has worked pretty well, there have been Unifi and Arene involved as well [...] And this corona scenario group, set up at Unifi, has meant that all universities have together prepared pandemic scenarios, how it develops and what its effects on universities, and also coordinated and made policies about restrictions. And locally we have also worked in close cooperation with [local UAS and vocational institute] (participant 5, university director position, translated from Finnish).

The interviewees agreed that organisational communication during COVID-19 has been sufficient and as good as it could have been:

Well, considering that no one really knew much anything at the start, as there was not a lot of research that had been done, I understand that citizens or teachers were quite nervous because there were no clear instructions. And then when summer and early fall 2020 started looking fine but then the situation got worse, I understand that people became a bit impatient. But I think [the decision-makers] have tried to stay on top of things the entire time and react accordingly. The Finnish Institute for Health and Welfare also started to have areas of expertise in their communication, so there was someone specialising in higher education institutions, for example. I would definitely assess the overall performance of decision-makers good, no special criticism. (P6, Director, translated from Finnish).

One interviewee did, however, criticise the siloed structure of decision-making, whereas another one commended the authorities for quickly setting up a network of information and ‘situation rooms’.

Overall, Finnish higher education institutions developed more local solutions to handling the pandemic. It seems, however, that most of the responses for the pandemic were ad hoc, as there were no pre-existing systems to respond to a crisis such as this. It seems that, ideally, these practises will form the basis for future scenarios; one interviewee who had been involved on national level crisis management was confident of this.

4.6 Conclusion and suggestions for future practice

Above we have presented the results of our analysis of twelve interviews by actors in or related to Finnish higher education institutions. The results were divided into three distinct themes: Sustainability of higher education systems; The purposes of higher education institutions in society; and the workings of higher education institutions.

Looking at all themes together, it could be summarised that from a technological as well as decision-making viewpoint, Finnish higher education institutions managed to tackle the pandemic fairly well. The existing infrastructure and the ‘digitally-oriented’ mindset of Finnish higher education institution actors ensured that the rapid transition to almost 100% online teaching and research went as smoothly as it could have gone in the challenging circumstances. The digital leap, which had been prepared already before the pandemic, also opened up new possibilities for collaboration, both within Finland and internationally.

However, the smooth transition also came with a price: despite the support by institutions, colleagues, and peers, there were not enough financial resources to accommodate all the new needs that the changed situation required. As a result, this lack of resources meant that higher education actors had to work longer days and generally be more flexible and innovative than ever before. Although some interviewees pointed out that working from home suits them very well, they also acknowledged that sitting in one place the entire

day, having zoom meetings one after the other without proper breaks is not something one can do for a very long period of time.

As to the crisis management and institutional activities, the interviewees estimated that the practices and networks created during the first 1–2 years of the pandemic would build way for structures for crisis management in similar future situations. Unexpectedly, the Russian attack on Ukraine in February 2022 activated new crisis management activities in both universities and UAS, starting with the termination of institutional co-operation with Russia. In our case university, for instance, the group responsible for COVID-19 continued as the steering group for exceptional situations, continuing its work not only on the pandemic but also war and conflict related measures.

Based on the results, we recommend Finnish higher education institutions to keep exploring different types of opportunities for research and teaching either fully online or in a hybrid mode. We would also like to encourage all higher education actors and research funders to critically examine what ‘internationalisation of higher education’ can mean in the 21st century – does it have to be people physically moving from one place to another, or could it be also something else? Finally, we would like all higher education institutions to keep developing initiatives around staff and student mental health and wellbeing.

The limitations of the study include the small number of interviews, as well as the inclusion of only one university and one university of applied sciences. Furthermore, the pre-set interview questions as well as the deductive nature of our qualitative analysis might have left out some interesting insights.

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Chapter 5 France

Dorota Dakowska³³

This country report deals with the impact of the COVID-19 pandemic on French higher education.³⁴ France has a centralized yet dynamic decision-making process: no less than five consecutive teaching adaptations were undertaken during the academic year 2020-2021. The data comes from both survey and qualitative datasets. The questionnaire and interviews show that systemic inequalities in funding and the division between selective and less selective undergraduate programs have made some higher education institutions more vulnerable in the face of the crisis. The perception of growing inequalities is thus noticeable (Dakowska, 2023).

5.1 Overview of research conducted

Interviews				
National system-wide actors Interviewees' profiles (e.g. ministry staff, politicians, unions, professional associations)	Staff at Ministry of Higher Education and Research (2 interviews so far, 1 in a mid-level position, in charge of European affairs, 1 executive in charge of strategic higher education questions) Rectors' conference: 5 interviewees (former or current university rectors, experts + staff member) Grandes écoles Rectors' conference (CGE) 1 interview with a staff member			
	Case 1	Case 2	Case 3	Case 4- 4a
Type of institution (e.g. large/small, public private, research/vocational)	Large university, capital city, research oriented	Mid-size university, smaller city, teaching and research oriented	Small 'grande école'	Large provincial university, IDEX And a vocational institute (IUT) that is formally part of the university but is

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				largely autonomous
Number of interviews	6	9	5	9
Top leadership (number/positions)	1	1	1	2
Middle leadership (number/positions) (in France, these positions are usually filled by academics)	2	2	1	2
Administrative staff (number/positions)	1	2	2	2
Academics (number/positions)	2	3	2	3
Students (individuals or group interviews?) (number of interviews)		1		
Other data (specify) (e.g. Documents, media analysis)	<p>Data from the Ministry of Higher Education and Research (MESRI), general press and specialised press (AEF), Reports (ANCMSP, OVS); we also accessed the unpublished archives of two informal working groups of the Rectors' conference (CPU) dealing with preparing the re-opening of the universities, then with preparing the next academic year + a report of the Grandes Ecoles rectors' conference presented to the Parliament.</p> <p>We have also produced our own questionnaire, designed and circulated in May-June 2021 among students, academic teachers, researchers, and administrative staff. We have collected 4312 complete responses, including over two thirds (2944) from students. 951 responses came from academic teachers (22%), 362 from administrative staff (8.4%) and 55 from researchers (CNRS mainly) who do not necessarily teach. About 81% of the answers come from universities, about 13% from Grandes Ecoles, about 3,8% from preparatory classes based in lycées. The questionnaire was filled out by members of a vast number of higher education institution (94% of which are public) in the whole country. A majority of respondents (64 %) are female. While most items</p>			

	were multiple choice questions, several open-ended questions were asked. The answers to these questions were coded and analysed with the help of the TXM textometry open-source software. The questionnaire was prepared at the University Lyon 2 (Université Lumière Lyon 2, n.d.) and diffused in many French higher education institutions.
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5.2 Country profile

5.2.1 Basic data about France

Population (2020)	67,098,824
Unemployment (2019)	8.5%
GDP per capita in PPS (2019)	106
COVID-19 caused GDP drop in Q2 2020	-13.8%
Gini (2018)	28.5
Human Development Index (2019)	0.891 (26)
Government form	Unitary semi-presidential constitutional republic
Political orientation of the current government	Liberal-conservative (president Emmanuel Macron)

5.2.2 Characteristics of French Higher Education system

Population of students	2,532,800 (2017) 2,730,000 (2019-2020) ³⁵
Tertiary education attainment (2019)	47.5%
Student-academic staff ratio in tertiary education (2017)	16.1
Number of higher education institutions (2016)	375 3500 (in 2020) ³⁶
Public spending on tertiary education as % of GDP (2015)	1.14%

³⁵ (MESRI-SIES, 2020a)

³⁶ Campus France. N.d.-a. 'Les différents types d'établissement d'enseignement supérieur en France'. <https://www.campusfrance.org/fr/etablisements-enseignement-superieur-France> (last accessed 3 December 2022)

Fees ³⁷	<p>[SEE EURYDICE REPORT 2018/2019 – Country page attached]</p> <p>Public higher education institution for 2020-2021:</p> <ul style="list-style-type: none"> - bachelor: 170€/year - master: 243€/year - Engineering schools : 601€/year - Doctorate: 380€/year <p>Private higher education institution: minimum 3000€/year (16 640€/year for HEC, 15 800€/year for ESSEC, 17 533€/year for ESCP Europe).</p> <p>higher education institutions where fees depend on revenues:</p> <ul style="list-style-type: none"> - Université Paris-Dauphine: bachelor maximum 280€/year, master max 6630€/year - Sciences Po Paris : bachelors 0-13000€/an, master 0-18000€/an. - IEP de Lille, Lyon, Rennes, Strasbourg, Saint-Germain, Toulouse: maximums between 3000 and 4000€/year <p>International students in public higher education institution (from outside EU): 2770€/year bachelor, 3770€/year, PhDs 380€/year</p>
Governance	
International students (% of total) (2018)	8,8%
Main international student origin countries (2018-2019) ³⁸	<p>Morocco 12% - 41,729</p> <p>Algeria 9% - 31,196</p> <p>China 8% - 28,436</p> <p>Italy 4% - 14,692</p> <p>Tunisia 4% - 13,025</p>
Number of Institutions in ARWU 2020 Top500	17

³⁷ 'Le coût des études supérieures en France', *Campus France* <https://www.campusfrance.org/fr/cout-etudes-superieures-france-frais-inscription>

³⁸ 'Chiffres clés de la population étudiante', *Campus France*, February 2020 https://ressources.campusfrance.org/publications/chiffres_cles/fr/chiffres_cles_2020_fr.pdf

5.3 Sustainability of higher education systems

5.3.1 Policy and funding priorities

One of the Ministry of Higher Education and Research priorities in the years and months preceding the COVID-19 pandemic was to steer public investment to promote ‘excellence’ and international competitiveness in selected higher education institutions. This policy was temporarily halted during the first lockdown when other priorities emerged, such as the need to assist students facing severe precarity. The reflection continues with some drawbacks. The distribution of competitive funds for universities’ strategies (research, teaching, cooperation with the private sector, territorial integration) continued in 2020 and 2021. Out of 800 million euros announced, nearly 300 have been attributed in November 2021 to 15 laureates. With universities heavily dependent on state funding, French public higher education institution has been facing a shock of the same magnitude as their UK counterparts, which are over-dependent on fees and on foreign students.

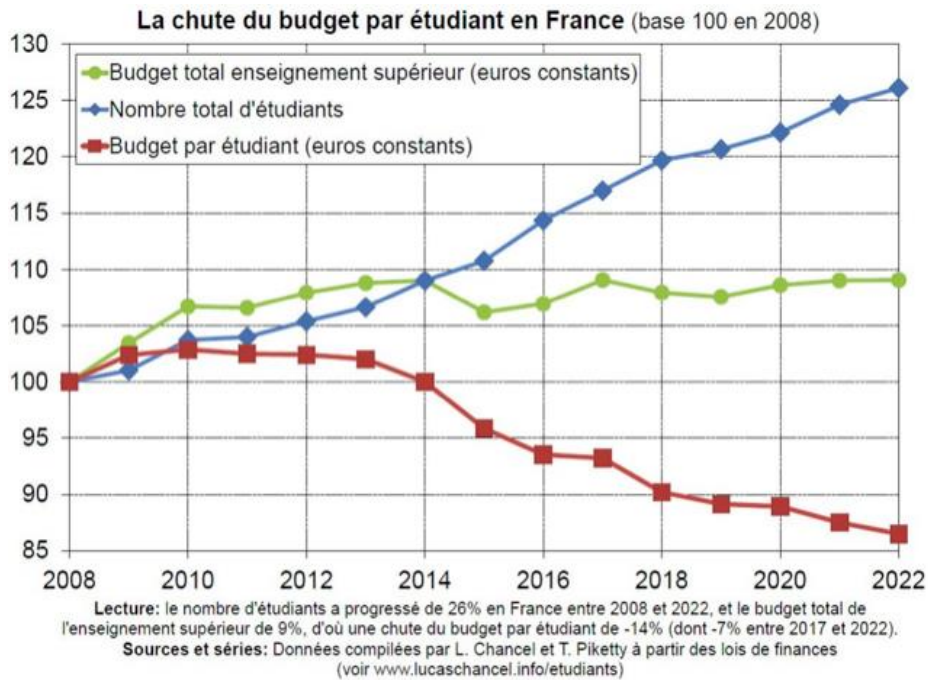
5.3.2 Internationalisation

During the pandemic, international student mobility (both incoming and outgoing) has sharply decreased, by 50% or more. Some partner countries refused to accept students from France. Some French higher education institutions decided to drastically reduce the number of incoming students in 2020-2021. While international mobility is considered as an important experience for students, the pandemic has triggered a new reflection on internationalisation at home (short-term mobilities, etc.). This might be an option not only for the European university consortia but also for students from underprivileged groups. In this respect, the questionnaire provides useful and complementary information to the qualitative data.

5.3.3 Differences within the sector

There are growing differences between higher education institutions. These differences are structural as the public funds respectively invested in universities, in Grandes Ecoles, in ‘prep classes’ (Classes préparatoires aux Grandes Ecoles, CPGE) vary. The average annual cost per higher education student in 2019 was 11,530 euros. But the average public

expense for a student in a prep class was 15,710 euros/ year while the average cost per university student was 10,110 euros (MESRI-SIES, 2021). Over the last decade, universities have absorbed most of the excess student population resulting from demographic trends, while the number of permanent teaching staff remained stable (Molénat, 2018; Beaud & Millet, 2021). As new staff recruitments decreased and student numbers increased, the yearly expense per student dwindled. The following chart was elaborated by Thomas Piketty and Lucas Chancel, based on Finance and Budget laws.³⁹



Also, students of most prestigious *Grandes Ecoles* such as the Ecole Normale Supérieure, which are recruited among the most privileged social groups are paid during their study period. This is also the case at the Ecole Nationale d'Administration and the Ecole Polytechnique (military school of engineering). The pandemic often made these structural inequalities more visible, as the students who are paid by the state and who come from privileged social groups were more protected by their status while students from underprivileged social groups, who had lost their jobs.

Still, the traditional distinction between *Grandes Ecoles* and Universities does not reflect the growing differentiation of the French higher education system. The competitive funding schemes introduced in the mid-2000s (Programme d'Investissements d'Avenir,

³⁹ (Piketty, n.d.)

PIA, Initiative d'Excellence, and the National Research Agency, ANR, see Musselin, 2017) aimed at promoting major research universities that would be able to compete in global academic rankings.

After the initial shock of the first lockdown in March 2021, smaller higher education institutions seem to have rebounded more quickly. The better endowed higher education institutions such as the Grandes Ecoles already had some experience of distance learning and adapted more quickly to remote teaching.

As the sanitary crisis goes on, we note different answers from different faculties (UFR) and even departments. For instance, some departments decided to resume courses on a face-to-face basis after the second lockdown, in February 2021. In the same university, some other departments decided to carry on with distance teaching.

5.3.4 Inequalities in the sector

The *gender imbalance* does not entail simple answers. Some recent articles point to the challenges of reconciling family life with a job in higher education and research, especially for precarious workers / women (Noûs et Tracé, 2020). But these reports can hardly be generalised.

In the questionnaire, the answers to the question on the gender imbalance (inequalities) are more hesitant than the answers to the question on the inequalities between higher education institutions.

Students have struggled due to the loss of part-time jobs. Statistics show that *precarity of employment* has been largely on the rise across several sectors and has taken a particularly severe toll on student jobs. According to the French Observatory of Student Life (OVE), 58% of students who usually work had to give up on their regular jobs during the pandemic, work reduced hours, or get a different job. However, 41% of students who stopped working were able to receive financial support. In total, 33% of students said they experienced financial difficulties, of which half stated that they were more significant than usual (Belghith et al. 2020). This was particularly noticeable for foreign students: 50% indicated that they struggled financially more than usual. On average, the estimated

loss of revenue for foreign students was 426€/month, compared to 133€/month on average for French nationals (Patros, 2020).

Precurity of employment in higher education and research was already on the rise in France before the crisis:

- Public financing: between 2010 and 2020, the budget for higher education was cut by 10% (Noûs, 2020).
- Recruitment: Average age at recruitment for professor-researchers is 35 (Noûs, 2019). Temporary agents teach a third of university classes and are paid on average under the minimum wage (Harari-Kermadec et Noûs, 2020).
- The national research agency (ANR)'s budget continues to plummet, leading to the rate of funded projects falling from 25.7 % in 2005 to 16.2 % in 2018 (Lutzky, 2020).

Many professors, researchers, and other agents of the French higher education system have reported on this rising precarity in the media, for instance calling for better practices to avoid the systematic use of temporary workers and to limit unpaid work (Université Ouverte, 2021).

The effects of the COVID-19 pandemic are therefore difficult to isolate because the crisis came in a context that was already unstable and tense.

5.4 The purposes of higher education institutions in society

5.4.1 Science

There is no simple answer on the question how the pandemic has affected research. For medical professionals and life science specialists, there is undoubtedly an interest in the public space (journalists, activists). This does not mean however that public decision builds on medical expertise concerning the virus and the need to preserve public hospital staff.

In an interview, Bruno Canard, a French specialist of coronaviruses, spoke out about how France and the European Union stopped funding his research despite his warnings that a

pandemic was very likely. He warns that research on these viruses takes years, and that providing funding only in times of crisis will never allow for proper preparation and anticipation (Dubessay, 2020).

In our study, we interviewed mainly scholars in social science fields (political science, sociology, lawyers, economists). Some academics serve as experts due to their research topics (public health, WHO). There was some debate in France on the state of the biomedical research in France and its perceived decline as France appears to be the only permanent member of the UN Security Council that was unable to develop its proper vaccine against COVID-19 during two years (Rabesandratana, 2021). The public underinvestment in research, especially fundamental research, appears to be one of the main underlying factors of this situation.

Data on investment in research in France

France was the 6th leading country worldwide in natural science research in 2019, according to the Nature Index (Nature, 2020).

France suffered from the most severe relative decline that year but retained its place as a leading country largely thanks to its large national research institute, the CNRS (Morin, 2019).

Public spending on R&D:

- Lisbon strategy requires EU members to spend at least 3% of their GDP on R&D.
- Germany: 2.410% in 2000, 3.176% in 2019
- UK: 1.617% in 2000, 1.756% in 2019
- France: 2.093% in 2000, 2.191% in 2019 (OECD, n.d.)

France's amount of R&D spending remained stable between 1996 and 2016. In comparison, China tripled its R&D public investment between 2006 and 2016. In 2016, a 256-million euro cut on higher education and research sparked controversy in France (Le Monde, 2016).

Will the COVID-19 pandemic change how France invests in fundamental research? The National Research Agency (ANR) has called for projects on the COVID-19, with a budget of 3 million euros, to “support scientific communities in their efforts to fight the virus”(ANR, n.d.). However, this new financing could just be the result of the lack of knowledge on the virus. It does not mean that the French government plans to make a long-term financial commitment in this area.

How do experts talk about and study the pandemic: the example of social and political sciences?

The French Association of Political Sciences gathered many references to social sciences publications dealing with the social and political impact of the COVID-19 pandemic. The authors discuss the COVID-19 pandemic management at the local, national and international levels. They examine the effects of the pandemic on public health, economic policies, and different social groups, in France and other countries (AFSP, n.d.).

Bansard and Bonnaire (2021) have made a quantitative and qualitative analysis of how social sciences and humanities scholars spoke out during the pandemic in the media, and of the tools they used to understand the crisis and its consequences.

Over 800 articles were published between March and July 2020, published by researchers mostly in the fields of sociology, economics, philosophy, history, and political science. The article questions their legitimacy to do so: many spoke outside of their specific fields of study. The main difficulty for these researchers was to balance scientific accuracy with a certain desire to express outrage and highlight some of the neglected aspects of the crisis. In substance, these articles analysed how the crisis was managed on a national and local level, but also sought to discuss the terms used to describe and explain it (ex: calling the COVID-19 a crisis implies that it was not foreseeable, which sparked debate).

5.4.2 Education

Students and higher education institutions have expressed concerns about their diplomas losing value due to the crisis and the adapted arrangements for classes and exams.

The Ministry of Higher Education and Research has downplayed these concern (Petitdemange, 2021) (admitting that qualifications might be somewhat different, but

arguing that students would benefit from greater autonomy, expertise in using digital tools, resilience and adaptability, and stress management).

Context - general evolution of applications for higher education institution places (numbers and fields)

In recent years, the number of students registered in the French higher education system has consistently increased for demographic reasons (MESRI-SIES, 2020a):

- 2015-2016: 2,509,800
- 2016-2017: 2,554,500
- 2017-2018: 2,622,400
- 2018-2019: 2,682,000
- 2019-2020: 2,725,300
- 2020-2021: more than 2.8 million

Between 2010-2011 and 2019-2020, universities have seen an average annual increase of their student population of 1.3%. Engineer training programs have had an annual average increase of 1.9%, and business schools of 6.3%. In total, on average, the total student population increases by 1.6% each year (MESRI-SIES, 2020b).

In addition to this increase in population, recent reforms may have impacted student choices. The French high school diploma and the application process to access public higher education institutions underwent significant transformations in recent years. By changing when and how students choose their classes in high school, changing the way they are guided and assisted in their post-high school choices, changing placement algorithms, and changing which schools one can apply to, the new national platform system may have altered orientation choices.

The effects of the pandemic on students' orientation choices

Although it is difficult to assess the effects of the COVID-19 pandemic on students' choice, some have been observed. Further research would be necessary to verify them. A March 2021 study found that almost half of the respondents (aged 18 to 30) felt that the pandemic affected their orientation choices, leading to reorientation, shorter or longer

studies, delayed or cancelled trips abroad, or changing areas of focus. Some opted out of general university studies, and transferred to shorter, more vocational options. In France, a significant number of students change their initial choice of study, and the pandemic seems to have accelerated this trend (Bancaud, 2021).

5.4.3 Labour market

According to the International Labour Organisation, approximately 400 million full-time jobs were destroyed in the first semester of 2020 worldwide (ONU Info, 2020). It is also estimated that because women are overrepresented in certain industries such as trade and manufacturing and the health and social sectors, they are more exposed to the virus and to loss of income. The COVID-19 pandemic has therefore broadened gender inequalities worldwide.

In France, the GDP dropped by 5.8% in the first trimester of 2020 (INSEE, 2020) which had severe effects on the labour market and the national economy in general. Between the end of 2019 and the end of 2020, 748 000 jobs were lost (OFCE, 2020).

Government measures aimed at minimising the impact of this crisis, and youth was made a priority. The government launched the plan “1 jeune, 1 solution” for 16- to 25-year olds (Ministère du travail, de l’emploi, et de l’insertion, 2020): a plan developed by four ministries (interior, labour, national education, and higher education) in partnership with public services for employability, local NGOs working for youth employability, local representatives, and firms. Overall, 6.7 billion euros were invested to facilitate transitions into the labour market.

Observatory of Student Life studies

Belghith et al.'s study (2020) showed that 58% of students who normally work had to stop work, reduce their working hours, or switch jobs. 36% of students were able to receive financial support. 41% of students who stopped working benefited from financial support. 33% of students said they experienced financial difficulties, of which half said they were greater than usual.

Student jobs: effects of lockdown (Patros, 2020)

	Worked before lockdown but had to stop/switch	Worked before lockdown but did not switch	Started working during lockdown	Did not work before or during lockdown
University	24.4% ⁴⁰	8.8%	2.9%	63.9%
CPGE	2.9%	Below 1%	1.5%	95.6%
Engineering schools	21.7%	11.8%	3.8%	62.7%
Business schools	40.9%	9.2%	3.9%	46%
Other	22.5%	8.8%	4%	64.7%
Total	24.4%	8.8%	3.2%	63.6% ⁴¹

Foreign students in France:

- 50% of foreign students said they struggled financially more than usual.
- Average estimated loss of income for foreign students: 426€/month

International mobility of French students:

- 72% of students who planned to study abroad in 2019-2020 were unable to leave.

Internships:

- In 2019-2020, 78% of students who had secured an internship were unable to do it as planned. For 23% of them, the internship happened with an adapted organisation, for 17% of them it was postponed, and for 38% of them, it was cancelled altogether.

Reorientation:

- 8% of students want to change their field of study, 4% want to stop studying, and 9% want to continue studying longer than planned.

⁴⁰ 24,4% of university students worked before lockdown but had to stop or switch jobs.

⁴¹ 63,6% of students in France did not work before or during lockdown.

Loss of income for students who worked during lockdown:(Patros, 2020)

	1-500 euros	501-1000	Over 1000	No loss of income
University	27.2%	7.4%	1.1%	64.3%
CPGE	62.3%	7.8%		29.9%
Engineering schools	21.8%	5.5%	1.8%	70.9%
Business schools	24.8%	7.8%	1.8%	65.6%
Other	33.9%	4.6%	0.8%	60.7%

Among the students who worked within lockdown, 27.2% of those studying in a university experienced a loss of income between 1 and 500€.

5.4.4 Relations with society

There were many debates related to online teaching. During Spring 2020, there was a widespread fear that the Ministry of Higher Education and Research would push for online teaching, and that this would decrease the quality of teaching. After the fact, opinions on the experience of online teaching have been mostly critical. The experience is deemed at best as a temporary solution but mostly as a painful experience for the teachers and the students: ‘nothing can replace the human relationship’. Online solutions are useful to a degree for research seminars. There still is a widespread fear of a political push in favour of distance teaching due to teacher and room shortages. However, some respondents to the questionnaire granted that they learned new teaching methods online.

5.5 The workings of higher education institutions

5.5.1 Distance and online education

Before the pandemic, there was virtually no digital teaching in most universities. All higher education institutions used digital platforms (e.g. Moodle) to post course-related content. There were some digital courses in some schools (Grandes Ecoles), both public and private, as these higher education institutions are highly internationalised.

When the pandemic began as far as the teaching staff was concerned, there was a lot of uncertainty due to the obligation to teach online without proper training. There was also anxiety about the possible (mis-)use of the course content (intellectual property) and of the academic teachers' image (some of them could be filmed without their consent).

5.5.2 Work of academics and support staff

The permanent reorganisation of teaching due to lockdowns and to the changing ministerial recommendations is deemed as a major challenge by most academic teachers. The surplus of administrative work, the need to provide moral support to student, the evaluation of essays online and the considerable increase in the amount of email to deal with are cited as the main factors of the work overload.

According to questionnaire responses, an overwhelming majority of academic teachers found that the pandemic required them to work more than usual.

Working from home was compulsory during the first lockdown. Then, universities remained open (campuses, libraries) even when teaching was online. The well-being of the staff did not seem a priority: students were a major source of distress / worry.

5.5.3 Duty of care

The pandemic had an impact both on the students and on academic staff (mental health). Several higher education institutions took the challenges raised by the crisis into consideration. In addition to the changes demanded by health requirements (distance learning and exams), it was up to each institution to introduce measures to protect and

support students and staff on a discretionary basis. The impact of the situation on mental health, difficulty to follow online courses, and lack of equipment were some of the effects that higher education institutions attempted to address.

5.5.4 Governance and decision-making

As far as digital governance is concerned, some changes might stick. Remote connections are deemed useful for meetings (time-saving) and in some cases for research seminars.

As far as the use of the data generated by e-learning platforms is concerned, fears were voiced during the first months of the pandemic (by IT staff, academics, lawyers) but once the platforms were set up, debates on data protection fizzled out.

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Chapter 6 Germany

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6.1 Overview of research conducted

6.1.1 Sampling information

Interviews		
National system-wide actors Interviewees' profiles (e.g. ministry, politicians, unions, professional associations)	Analysis of 26 official statement by the German rectors' conference	
	Case 1 (C1)	Case 2 (C2)
Type of institution (e.g. large/small, public private, research/vocational)	Large research university	Regional university middle size
Number of interviews	4	6
Top leadership (number/positions)	1	1
Middle leadership (number/positions)	1	1
Administrative staff (number/positions)	-	1
Academics (number/positions)	2	3
Additionally, we analyzed 133 further documents such as emails and press releases from the two cases		

6.2 Country profile

6.2.1 Basic data about Germany

Population (2020)	83,166,711
Unemployment (2019)	3,2%
GDP per capita in PPS (2019)	121

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COVID-19 caused GDP drop in Q2 2020	-9,7%
Gini (2018)	31,1
Human Development Index (2019)	0,939 (4)
Government form	Federal parliamentary republic
Political orientation of the current government	Conservative (Christian Democratic Union)

6.2.2 Characteristics of the Higher Education system


Population of students (2017)	3,091,700
Tertiary education attainment (2019)	35,5%
Student-academic staff ration in tertiary education (2017)	12,1
Number of higher education institutions (2016)	479
Public spending on tertiary education as % of GDP (2015)	1,01%
Fees	No tuition fees at public universities but students have to pay a comparably low amount for administration. Tuition fees in private institutions can be much larger.
Governance	
International students (% of total) (2018)	10,0%
Main international student origin countries	China (1), Turkey (2), India (3), Syria (4), Austria (5), Russia (6), Italy (7), Ukraine (8), Cameron (9), France (19) (statista 2021)
Number of Institutions in ARWU 2020 Top500	30

6.2.3 The Pandemic in Germany – overview and timeline⁴⁴

The corona crisis reached Germany in late January 2020, when the first infections with the virus were detected. The pandemic became the predominant issue in the media, and politicians struggled to develop a proper strategy to deal with the crisis. Perceptions of the crisis and the political decision-making were very diverse, and people were searching for ideas and suggestions for how the pandemic could be controlled (see also Seidenschneur 2021), and how the situation could be made more endurable (see also Bergan et al. 2021) or even used to develop innovative solutions (Moralli & Allegrini 2021).

⁴⁴ It is relevant to note that this is not the only project researching the impact of the pandemic on German universities. The CHE (<https://www.che.de/corona/>) offers for example information and collects research papers on this issue such as other German research institutes.

During the first stage, the introduction of restrictions and their perception played a prominent role. Right from the start, large events were cancelled. When COVID-19 spread and finally reached the pandemic stage, restrictions on travelling were imposed, non-essential stores had to close, and the government announced far-ranging limitations on physical contact. While the winter term of studies at German universities (ending in February 2020) still took place face-to-face, the summer term of 2020, beginning in April, had to be quickly reorganized for distance and online teaching. In May, Germany reached the maximum restrictions on social contacts and political regulation of social life. In early May, there were protests against the restrictions in various cities. At this time, the government's way of dealing with COVID-19 changed. The second stage of the corona crisis in Germany began when the government started loosening the restrictions. However, this only affected academia sometime later. When schools opened again, most teaching at universities (though not all) still took place online since it was regarded to be more practical. In 2021 more and more events started to take place in presence at German universities, but at the time we are writing this report, a large number of academic events are still taking place online or in hybrid formats. It is important to note that organisations differed to some extent regarding when and how regulations have been implemented. The table below is based on documents from one of our cases, which defined when different regulations were put in place. This case gives an impression of the development of German universities during the pandemic.



2021 – March	– April	– June	– July	– August	– September	– October	– November	– December	– 2022	– January	– February	– March	– April	– May	– June	– July	– August	– September									
Events were cancelled	To work in the home office was offered	Different buildings of the university were closed	Work in the home office continued	Teaching Online	Offers to extent timely working contracts for academics	During the early summer, the infection number became lower	The organisation reminded academics to avoid travelling and to work at home	Teaching during the winter term 2020/21 still took place online.	Only a few selected classes were planned in hybrid formats for first-semester students	No larger change in regulations occurred.	Teaching happened online, work in the home office is obligatory	Libraries can be visited by a limited number of students	Teaching takes place online except for teaching in laboratories where other formats are not possible	The organisation now expects many employees to be present at least for some share of the working time	Teaching in presence is possible with only 50% occupancy of the rooms and for people who are vaccinated, recovered or tested	Oral exams can be done face-to-face if alternatives can't be found	The home office remains obligatory if there is a way to do work at home	Under strict regulations of keeping distance and wearing masks etc. oral exams and	For those who had to be present, strict regulations concerning distance and	The home office continued for most employees.	For those who raised again. Finally, large parts of the work at this university happened in the home office	During the early summer there were ideas about opening the organisation during the winter term, but the number raised again. Finally, large parts of the work at this university happened in the home office	During the summer there were ideas about opening the organisation during the winter term, but the number raised again. Finally, large parts of the work at this university happened in the home office	Offers to qualify in workshops for online teaching and to participate in other workshops	Ideas for informal meetings online such as coffee breaks	Teaching during summer term started with delay some online	Newsletter about Corona-regulations



2021 – March – April – June – July – August – September – October – November – December – 2022 – January – February – March – April – May – June – July – August – September	
Licenses for online teaching platforms	Pick-up service at the library
Delay of exams	Physical exercises online
E-Mails with ideas for online teaching	by the sports department
Initiatives to make the university leadership extent timely limited contracts	
	Libraries continue to lend books outside the building which have been ordered – no presence in the building
Vaccination campaign employees	The university started a vaccination campaign for employees
	But numbers may rise again, and people expected new regulations...

6.3 Sustainability of higher education systems

6.3.1 Policy and funding priorities

The analysis of the interviews and collected documents show three tendencies that occur simultaneously regarding governance and funding.

The first tendency highlights the need of continuity in times of crisis. Scientists refer to the structure and format of funding programs and the sum of available funding and argue that the funding did not change during the pandemic. University managers refer to communication within the university leadership and the higher education ministries: ‘We decided not to change our corporate and organisational strategies and structural plannings given that there was no way to plan strategically without knowing the future’ (C2⁴⁵, I2). The second tendency refers to content-wise changes to research funding. Given the nature of the crisis, scientists suppose that proposals **which** contain content related to the pandemic may be more likely to receive funding: ‘Many calls and proposals address the crisis now, research has changed with this regard’ (C1, I4). In the interviews, there are now precise numbers and shares that are reported about these changes. The third tendency we found in the documents is mainly communicated by the German Rector’s Conference (HRK). This concerns the communication with the ministries and the request for additional funding given new challenges such as: the greater need for technical equipment, IT staff and the further education of teachers (HRK⁴⁶ 03/21b); infrastructural needs, such as buildings, for additional housing opportunities (HRK 03/21b); and the creation of new courses of study meeting the demand of health issues (HRK03/21b).

6.3.2 Internationalisation

The HRK highlighted the high value of internationalisation for research and the academic field in April 2020 (HRK 04/2020), arguing that international cooperation is indispensable for German universities. What’s more, they posit that, in times of crisis, it is necessary to the HRK to do everything possible to intensify international cooperation and help partners based in regions which are hit harder by the crisis compared to German universities (HRK 04/2020).

⁴⁵ C1 – Case 1, C2 – Case 2, I - interview

⁴⁶ HRK – Press release from the German Rectors Conference

This mirrors the significance of international cooperation as an academic value in the field of higher education, which is also highlighted in times of crisis (see also Seidenschnur et al. 2020).

However, having a more pragmatic look at the interviews and how internationalisation changed during the pandemic reveals the simultaneous occurrence of the partial growth and partial decline of international cooperation. International cooperation grows partially because more events are organized online, and participation for international partners or persons becomes possible without being physically present (C2, I1). International cooperation declines during the pandemic because visiting students and scholars decide to stay at home or cannot travel (C1, I3; C2, I2), and since online formats do not allow small talk, it becomes more difficult to create new ties and partnerships (C2, I4). Additionally, ongoing cooperation becomes more difficult the longer the pandemic persists. Interview partners report that in the first half year, cooperating online was not an obstacle, but that the longer people cooperate exclusively online, the more fatigue they experience (C1, I4, C2, I4).

6.3.3 Differences within the sector

The interviews and the analysis of the documents only point to one type of differences within the sector. Differences between different archetypes of organisations are not directly mentioned, but differences between subjects are relevant. These differences concern education and research.

Concerning education, three different cases are mentioned. The first case includes teaching that has been transferred into online spaces and has thereby required new formats. Especially people from the social sciences reported on new teaching techniques and ideas which made online teaching possible but increased the workload: ‘At my department, people invested a lot of energy into new teaching formats in order to make this possible’ (C2, I2). The second case also refers to some formats in the social sciences but even more to reports by an engineer. This case plays with the idea of simulation. Here, students had been working with a technical program on their computer at university before the pandemic and were instructed by the teacher who walked around the room and checked if things were going well. For such cases, the interview partner reports that simulating these classes online was relatively easy: ‘It is as if I would be in the classroom with them just online. It’s working quite well’ (C1, I5). The third case refers to subjects which include experiments and exercises. Some of them may be done online, but

others can't. One example in the interviews comes from a product designer: 'You can't teach this theoretically. It's not done by watching a video. You learn how to do things in practice. You need to experience the materials you are working with, to feel them, to study them, test what is possible, and combine different materials...' (C1, I6). Another case was reported by an engineer: 'I have a class in which we simulate crashes, we let things crash into a wall, difficult to do that at home' (C1, I5). Such examples also fit additional subjects in the natural sciences or medicine, arts and sports. The HRK acknowledged special difficulties in two statements. In May 2020, the HRK mentioned that the subjects of arts and music face special difficulties when not being able to teach in the presence (HRK 05/20). In March 2021, the HRK also reported special difficulties when studying medicine or sports (HRK 03/21).

Not only education is affected differently according to the need to do experiments: research also suffers. However, our interview partners at least argued that research continued in most cases, even though it had to be reorganized in order for people to be able to keep distance and has even been slowed down due to regulations regarding the number of people who can be present in the labs (C1, I5).

6.3.4 Inequalities in the sector

Regarding the question of social inequalities, the data shows three interesting developments. The first is based on the observation that the pandemic has increased existing inequalities. Here, the interview partners argue that social inequalities characteristic of German society and the academic system have grown during the pandemic: 'I would suggest that the inequalities we already had before increased' (C1, I4). Examples of disadvantaged groups are students without financial resources, who are often provided by parents (HRK 03/21); international students, who face growing challenges to organising their stay – a pre-existing problem (C2, I4); and parents who face the challenge of organizing homeschooling during the lockdown (C2, I2). Concerning childcare, there is no further differentiation in the interviews regarding gender differences. The interview partners in this study point to fathers and mothers struggling with the situation but describing higher education as a field with rather liberal values. Some interview partners make suggestions that the parent working in higher education is more likely to engage in homeschooling since the partner may be in a job which is less flexible with regard to working hours and home office or even labelled 'system relevant' during the pandemic and therefore without the opportunity to the home office (C1, I4; I5).

The second interesting observation is that some interview partners indicate that this increase in pre-existing social inequalities leads to an increased recognition and valuation conflicts. The question of which groups are addressed and to which extent (by often rather pragmatic governance measures) is translated into valuation systems. In this system, the distribution of merits indicates how valuable different social merits are; members of different groups have different conceptions of how valuable they should be: 'Now, we have the interesting situation that universities are spaces where such recognition and valuation conflicts become visible' (C1, I1).

The third interesting finding is that besides the arguments showing how existing inequalities have increased, some interview partners also spot windows of opportunities in this field with changing and less institutionalized organisational processes (Eyal 2012). They argue that organisational change and especially online events offer some groups new opportunities for participation (C2, I4): For instance, parents able to participate in evening events at home, or disabled people who can avoid physical barriers or the opportunity to participate in online events worldwide.

6.4 The purposes of higher education institutions in society

6.4.1 Science

The discussion of the role of science and the need for innovation and expert knowledge in society includes three major aspects: the invention of vaccines and other things relevant to fighting the pandemic, the development and contextualization of expert knowledge relevant to the pandemic, and the relevance of international cooperation to develop new knowledge.

Concerning the invention of vaccines, interview partners discuss the universities' role as research institutions. They observe that inventions of vaccines often take place in private and public organisations outside universities, amplifying a trend in which science is drifting outside the classical space German research universities provide: 'One can have the impression that the pandemic has amplified this tendency. Look at the process of the development of vaccines.

Universities played no big role. Look at Israel. New emerging science centres came up, and we have to question what this means for traditionally grown German research universities' (C1, I1).

However, interview partners argue that even if innovations are to some extent made elsewhere, that does not make universities and their scientists dispensable. Instead, the pandemic contributed to rising demand in society for scientists who make sense of research results in terms of the 'contextualization' (C1, I4) and 'authorization' (C1, I1) of knowledge: 'Facts need to be contextualized in order to make a sustainable statement, the pure data is not enough.' (C1, I4). This observation includes the idea of a changing role of researchers since they gain importance as authorisers and sense makers of knowledge instead of inventing and creating it.

Besides the question of the role of research at universities, plenty of comments highlight that research involving national and international cooperation between universities and private enterprises is highly relevant and needs to be maintained during the pandemic as a foundation stone. While interview partners argue that a crisis can also bring scientists together to build new teams in order to do research on critical issues (C1, I4), the HRK demands that the government provides financial resources for cooperative projects in difficult situations, for instance, if businesses can no longer provide their share of necessary funding (HRK 1/21). At the same time, there is a strong belief that research will continue in times of crisis (HRK 03/20).

6.4.2 Education

While research is expected to continue with less organisational interference, the effort that must be undertaken by political actors and university administrators in order to keep education running is regarded as significant. The HRK demands a 'sophisticated procedure to reduce disadvantages for students and young researchers' (HRK 03/21) caused by the new teaching mode. Administrators and departments spent energy on measures that prevent students from dropping out, reduce the workload, and allow them to graduate (the discussion on such measures will be done under issue three: working conditions of academics, online teaching and the universities' duty to care). Having a look at the curriculum of the two universities, we can observe quite a few courses directly addressing the pandemic in their title. Unsurprisingly, education changed not only regarding online teaching; societal discussions, demands and crises

also changed how scientific knowledge is taught and applied to the current situation and demands.

6.4.3 Labour market

There have been no major contributions by the research partners and no explicit discussions in the documents about issues related to changing demand of labour markets during the pandemic. Especially there are no remarks content-wise. The interview partners don't see a change in the demands of organisations which may be future employers of their students.

The only observations concerning the labour market reported by the interview partners concern job offers during the early stages of the pandemic. Here, some interview partners report an increase in applications: 'If the economy grows, they make more profitable offers. But in times like this, the public sector promises secure jobs, and we see that in the number of applications' (C1, I3).

6.4.4 Relations with society

Concerning the relations of universities with society, two questions and two effects have been discussed in the data.

One question concerns the position of universities and how they are recognized and valued by political decision-makers, media and other members of society. This question accompanies a comparative approach. One example of this perspective is visible in the statements of the HRK, raising the question at what time universities as public sector organisations receive free corona tests compared to other organisations and concluding that this decision mirrors how political actors rate universities' role in society and their performance during the crisis: 'It is important that our employees receive free Corona tests quickly, as planned for businesses. This equal treatment would also value what universities achieve in research and education and what this contributes to society' (HRK 03/21). The other question also concerns the relation of universities to society but from a different perspective. Here, it is questioned if universities have contributed enough in terms of welfare and responsibility for their students during the pandemic (C1, I2). This question is discussed in more detail under issue three.

Besides the discussion of these two questions, three possible effects are considered by the interview partners concerning universities' relation with and their role in society: the distancing effect, the drift effect and the reminder effect. All three possible effects, which are discussed by interview partners, play with the ideas of continuity and of amplification. Amplification means that the pandemic exacerbated pre-existing trends within German society (see also Holst et al. 2020). The distancing effect brings a negative tendency into the discussion regarding populist movements: 'I would say that the pandemic amplified trends. Let's look, for instance, at the 'Querdenker' (a German populist movement). They did not believe in scientific findings before, and now they just deny that COVID-19 exists' (C1, I2). The drift effect also brings a rather critical suggestion into the discussion. This effect discusses the universities' role as research institutions in society and argues that it has been a tendency that important research has taken place more and more often in private and public organisations outside of universities (C1, I1). The reminder effect highlights that the pandemic brought the societal need for education and science to the forefront and thereby reminds us of the growing importance of the role of universities in society: 'Higher education institutions play a central role for the future of our country. They fulfil their tasks since almost two years of the pandemic under large difficulties with a great sense of responsibility' (HRK 11/21). The reminder effect is underpinned by the role of experts who make sense of current scientific and societal developments in the media and play a crucial role as consultants in political institutions.

6.5 The workings of higher education institutions

6.5.1 Distance and online education

The shift to distance and online education in universities is probably the most discussed topic in higher education organisations and points to the relevance the pandemic has for the digitalisation of teaching (and also other processes at universities) (see, for instance, Hüther et al. 2020). Online education has been comparatively less developed in Germany even though the technical opportunities and support have been provided. The pandemic changed the situation from a situation with some academics experimenting with online methods into a situation in which almost every academic changed to online teaching, which induced a major technology push effect. One interview partner summarized that, regarding teaching, it was as if the organisation had been newly founded in the summer term of 2020 (C2, I2). Given the

richness of impressions and perceptions in the discussion, we can only summarize the logic of different perceptions without being able to summarize which point of view is dominant and which is rather expressed by a minority.

First of all, we can say that there is a high grade of satisfaction between university leaders and scientists concerning the administrative support for switching teaching to an online format. Even though the higher education literature often suggests some tension between researchers and administration in younger developments within the field of higher education (Billot 2010), concerning the administration of the pandemic, we only find satisfied comments about the technical support: ‘The IT and media service was extraordinarily engaged’ (C2, I4). This may indicate that the crisis can bridge gaps and reduce tensions between different intra-organisational groups.

Second, the data includes discussions about student and teacher workload. Even though we did not interview students, academics report that they have heard complaints about the rising workload on the student side, driven by expectations to do a larger number of smaller tasks, projects and homework (C1, I4). On the teacher side, academics report that they have invested much time in preparing online teaching, for instance, through recording videos. Interestingly, in some cases, this investment included the hope for future gains since videos can be reused: ‘They have invested a lot of time and thought in how to create a good podcast or video. I have also invested a lot of time, but this can be watched and used at different times’ (C2, I2).

Third, reflections on online education address the question of negative and positive consequences. Despite the efforts undertaken by teaching staff, academics share the impression that students are rather on the looser side of the pandemic and suffered more than other groups during the pandemic. This is partly because certain subjects and fields cannot be taught online (C1, I5 and I6), but principally because the social side of student life cannot be transferred into the virtual space (C1, I2, C2, I2). Regarding those who have profited in some regard in a situation where everybody has lost something, interview partners point to some gains for social groups who can participate online more easily than face-to-face. Interview partners mention physically disabled persons, persons living at distant locations and parents who spend less time getting to the university and back. Parents are an interesting example. Their experiences document how people have dealt with the crisis and how the associated effects depend on different framings. Though parents may be deemed to benefit as far as their commute is

concerned when it comes to discussions of working time, parents with school-age children are labelled as the most disadvantaged group during the shutdown (be they students or academics).

Fourth, recounts of online teaching often include a story of the crisis. Listening to these narratives, it is possible to hear how the character of online teaching changed over time: ‘The first semester was somehow exciting for everyone. It was an experimental semester. The second, I would say, was a depressed semester. We started to oppose things, and it became more revolutionary. The third semester (since the crisis began) is a semester of routines. We are all bored, we are skilled with things, there are no interferences, everyone knows what to do and we are bored (C2, I2).’ Of course, different stories are told by different interview partners. Nevertheless, they show that the crisis is characterized by how people experienced the changes to work and life in the field over time.

Fifth, there are plenty of discussions on the role of teachers and students and how it changed through online teaching. We have a wide range of possible roles depending on how teaching has been transported into the virtual space. In some cases (in our interviews, it was the more technical courses), the role of teachers and students seems to be more similar to teaching in presence models, since the interview partners talk about how they managed (or tried) to simulate the old teaching processes online: ‘It’s like standing behind the student and watching over his shoulder when he works with the program’ (C1, I5). In other cases (in our study, primarily the social sciences), interview partners reported a transformation in teaching instead of a simulation and described, for instance, how they made use of breakout rooms. Here, they report teachers taking the role of a moderator more often (C1, I4).

Sixth, interview partners raised the question of what has been omitted and what has been kept when teaching using new online methods. Here, interview partners differentiate between different lecture formats and speculate that those formats ‘which do not require a high degree of interaction’ are more likely to remain online (C2, I1).

6.5.2 Work of academics and support staff

The work of academics and support staff is again a largely discussed and described topic. The pandemic changed the everyday life of people working in the field of higher education and interview partners were very communicative in sharing their experiences. Hence, we gathered

many impressions from the ten interview partners. However, given the comparably small number of interview partners and large extent of narrations, we can only present different perspectives with a comparably low grade of systematization of the findings without the opportunity to test how far they are generalizable.

Overall, interview partners report how life and work changed, especially regarding home office, from one day to the next. This is despite the fact that, for academics, the home office is in any case more common compared to people working in other economic sectors (C1, I2). The partners relate the negative and positive effects of these changes in the interviews.

Positively, some interview partners mentioned that life quality increased through higher flexibility. They could, for instance, spend the time they needed to travel between locations on family issues or hobbies instead (C1, I4; C2, I1; I4). In other moments, interview partners argued that they worked more efficiently. Again, they mention that they spend less time travelling and also that they have been less often contacted for unforeseen reasons: ‘All the unexpected disturbances, I sit in my office, someone knocks on the door and wants something, I lost my thoughts, I start to work again, someone else wants something different, that does not happen in home office’ (C1, I1).

But there are also plenty of negative effects mentioned by the interview partners. One is the low degree of networking and socializing. Some miss lunch with colleagues (C1, I4), others argued that a lot of ideas and solutions for problems are developed at random talks in the corridor which no longer take place (C2, I1), and academics who do their conferences online miss the small talk which they consider as a repository of new ideas and potential cooperation (C2, I2). Another point is that interview partners report a different character of online meetings compared to face-to-face meetings. They argue that online meetings are often more pragmatic and do not allow for the interpretation of body language in the same way (C1, I2). Also mentioned were the additional working hours caused by new challenges such as online teaching (C1,I5), different burdens for different people such as the difference between academics who are more involved in teaching compared to those who do research (C1, I5), people who disappear from organisational life and are no longer available for less urgent issues (C1, I6), and also health issues cause by less physical activity (C2,I2).

6.5.3 Duty of care

In the data, three major concerns characterize how the duty of care is perceived and discussed. These concerns are related to three groups of people: students, international students, and PhD candidates and postdoctoral researchers on time-limited contracts. The concerns can be roughly differentiated into financial problems, social problems and problems caused by the loss of time.

Financial problems are especially mentioned for students: ‘Students often need the money they make in jobs in branches struck by the pandemic. Their situation can become very very difficult’ (C1,I2). The HRK (04/2020) reports on political responses to financial problems of students, separating them into two columns: One is an ‘interest-free loan for German and international students up to 650 Euro per month’, the other is a 100 million Euro emergency relief given to the ‘Studentenwerk’ in order to support students who need help. This money does not have to be paid back. While these instruments are appreciated in general, there are discussions about the bureaucratic procedures and if the sum of funding is high enough.

Problems resulting from fewer social contacts are claimed by potentially everyone, but a special emphasis is given to students in their early semesters and international students who ‘come in a new city, sometimes have to go in quarantine and have no interactions, they don’t even know someone who organizes food for them’ (C1, I6). Interview partners report on resulting mental problems and about attempts to obtain care. However, with this regard, some interview partners also refer to the limits of what can be done: ‘I think basically the university developed some good ideas beginning with easy things such as zoom but also mentoring and so on, but this is not enough, and unluckily the frame conditions are of a kind that you have few opportunities to do something’ (C1, I2). Especially the social aspect of care also induced thoughts about how organisations have to change in the future: ‘We have to make additional offers in the service field for students. To raise questions about their problems, critical moments in their life and become better there’ (C1, I1).

Problems caused by the loss of time again concern all three groups. The general strategy here is to extend limits and give people additional time on their contracts or for their courses of study. The HRK reports, for instance, that new political regulations allow the extension of working contracts (HRK 01/21), and interview partners report that they made use of this option

as far as possible (even though we cannot say if this is the case in general): ‘It is usual that we evaluate proposals very generously. I don’t remember one which we denied’ (C1, I3).

Additionally, the duty of care is discussed by university managers regarding health issues, specifically regarding how people can be protected from infections and how vaccinations can be provided early for the members of universities: ‘The question was about which parts are regarded as relevant for the system by the ministry and the early comments from the ministry have not been very helpful. But we supported people to get the required documents’ (C1, I3).

6.5.4 Governance and decision making

As for the issue of governance and decision making, we think many things have already been addressed in our report. We presented how universities as organisations addressed different social groups who have been struck hard by the pandemic, and how they developed approaches to offer at least some help to students and employees. This concerns time extensions for working contracts or study programs. Justifications are given, for instance, with regard to caring for kids or parents, which becomes more challenging during the pandemic: ‘With regard to human resources management (...) it is the question who is in the position where part of his job is to do his PhD or Habilitation. There, the time is running, but people may have no time to qualify during the pandemic. Or in education: how will we deal with extensions of time frames and with exams. There are many initiatives and ideas. How do we proceed with people who need to do field research that they can’t do for one year. Or with people who stay at home and have to care for their kids and so on...’ (C2, I1). We have presented measures of how universities address these issues earlier in the report.

We also presented that the change from working in presence to working from home and teaching online has been a major challenge for organisations: ‘The most radical change I would say was indeed to switch from work in presence to work online and at home from one day to the next’ (C1, I3). Regarding online teaching, university managers report that they ‘managed in fact to switch 98% of teaching into online teaching. Almost nothing was cancelled’ (C2,I2). In this regard, it can be argued that the crisis has moved administrators and academics closer together in our cases since all scientists appreciated the efforts undertaken, the support given and the speed by which administrators managed the transition. Accordingly, the HRK (05/20)

noticed that ‘higher education institutions have managed in admirable speed and quality to create concepts and infrastructure’.

In addition to the questions we have already discussed in the report concerning how different groups have been addressed and how digitalisation has been managed, we also include narrations of university leaders regarding crisis management. They talk about how they changed from managers skilled in the organisation of higher education institutions into crisis managers: ‘Crisis management is a completely new task. We had to define rules for every member of the organisation, make sure that they follow these rules and during some episodes of the crisis we had to create new rules in a two-week-rhythm’ (C2, I2). Furthermore, university managers speculate about changes which will stay and others which will not. They try to figure out which elements are useful and wish to become permanent. This is especially relevant to where members of the organisation do their work, and therefore online formats (C1, I3). On the systemic level, questions about the circumstances under which universities can fulfil their role as research universities in and for society in the future were discussed. Here, the HRK can be seen as one example of an organisation which communicates the universities’ interests and expresses financial claims for the funding of universities ‘for more innovation power in the future and to take the right measures from the crisis’ (HRK07/20).

6.6 Conclusion

Analysing our findings, it is necessary to mention that there are interpretative limits resulting from the number of interviews we conducted. Future research should expand this number. It would also be helpful to include ethnographic approaches or group discussions to be able to focus more directly on processes and actions or to include more quantitative data. Additionally, we only did research at two organisations. It would be important to include more archetypes of higher education institutions and systematize the way different groups of actors and subjects are addressed.

However, we think that this research produced valuable insights into how the pandemic did or did not change higher education on the systemic, organisational and individual levels. What we found was an interplay of continuity, amplification of pre-existing trends and changes, each highlighted by the narrations, depending on the issue and the topic.

Continuity, amplification, and change

	Continuity	Amplification	Change
Issue 1			
Policy and funding priorities	Structure and format of programs.		Partly content of new projects.
Internationalisation	High value of international cooperation.		Punctual growth and punctual decline of international cooperation.
Differences within the sector			Different subjects changed to a different extent.
Inequalities		Groups who faced more difficulties or challenges and were already challenged are struck harder. Increasing valuation conflicts.	
Issue 2			
Science	The role of science and innovation in society.		Discussions if research universities managed to remain hotspots of science and education during the crisis and if their role will change in the future.
Education	Few symbols of change regarding the role and structure of universities as educators in society.		Large changes in teaching processes due to online teaching (see issue 3).
Labour market	No larger changes were mentioned (only some short-term effects).		
Relations to society	Pandemic reminds us of the importance of universities' roles and tasks.	Critical perspectives on education and science for instance by populist parties intensified.	Problems of comparisons: Are universities valued enough by political

		The growing drift towards science outside of universities is discussed.	measures compared to other organisations? Do universities care enough for their members in times of crisis?
Issue 3			
Distance and online education			Improving relation between academics and administration. The workload for students. New positive and negative effects of online teaching. Exhaustion of people with online teaching over time.
Work of academics and support staff			Transition into the home office and work online. Additional time and rising efficiency. Negative effects due to less networking, fewer spaces for spontaneous cooperation and socializing.
Duty of care	Universities have to care for their members. In case of the pandemic especially national and international students and academics on timely	The way young scientists are employed has been discussed critically; these discussions intensified as well as the question of service quality for students.	New governance mechanisms to provide assistance developed. Duty of care with regard to health issues and vaccination.

	limited working contracts.		
Governance and decision-making	Some changes are discussed as temporal solutions which will disappear after the crisis.	Amplification of social inequalities requested managerial answers.	Home office and online education have been major challenges requesting new and spontaneous crisis management. Upcoming role of crisis manager.

Concerning continuity, the data shows that large parts of the discussions take place on the systemic level. Here, the interview partners refer to political continuity, the high importance of science and education which have been demonstrated by the pandemic in general, and academic values, such as the value of international cooperation. However, not all discussions on the systemic level highlight continuity. The role of research universities as hotspots of innovation during the crisis is for instance critically discussed regarding potential changes.

Amplification is highlighted when it comes to discussions of social inequalities and the relation of universities and science to populist movements. Here, we find trends that pre-existed the pandemic and have been amplified during the crisis. This amplification increased valuation conflicts and requested managerial answers from politics on the organisational level.

Given that the pandemic is a critical incident (Butterfield et al. 2005) for the higher education system, we find change on the systemic, organisational and individual levels, and regarding more or less every issue and topic. Here, interview partners and the documents provide perspective on the positive and/or negative effects of these changes and theorize how long these changes are likely to persist after the pandemic.

The way continuity, amplification and change occur documents how higher education systems respond to different national and international dynamics, which in turn determine the way they change in times of crisis.

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Chapter 7 Hungary

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and Eszter Szendrei-Pál⁵²

7.1 Overview of research conducted

Interviews			
National system-wide actors	András Derényi, PhD – expert Zoltán Dubécz, PhD - Secretary of the Hungarian Rectors' Conference		
	Case 1 – Budapest Business School (BBS)	Case 2 – Corvinus University of Budapest (Corvinus)	Case 3 – Central European University (CEU)
Type of institution (e.g. large/small, public private, research/vocational)	large, public, teaching-oriented (vocational – applied university)	large, private university	small, private, research-intensive, international in character
Number of interviews	16	10	14
Top leadership (number/positions)	2	2	3
Middle leadership (number/positions)	4	1	2
Administrative staff (number/positions)	3	2	0
Academics (number/positions)	3	2	4
Students (individuals or group interviews?) (number of interviews)	4	4	8

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Other data (specify) (e.g. Documents, media analysis)	Hungarian Rectors' Conference: <ul style="list-style-type: none"> - Summary of Hungarian Response to COVID-19; - COVID-19 related developments related to the Hungarian Higher Education University surveys
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Period of data-gathering: 2021 spring

7.2. Country profile

7.2.1 Basic data about Hungary

Population (2020)	9,769,526
Unemployment (2019)	3,4%
GDP per capita in PPS (2019)	73
COVID-19 caused GDP drop in Q2 2020	-14,5%
Gini (2018)	28,7
Human Development Index (2019)	0,845 (43)
Government form	Unitary dominant-party parliamentary republic
Political orientation of the current government	Conservative (Fidesz)

7.2.2 Characteristics of the Higher Education system

Population of students (2017)	287,000
Tertiary education attainment (2019)	33,4%
Student-academic staff ration in tertiary education (2017)	12,1
Number of higher education institutions (2016)	53
Public spending on tertiary education as % of GDP (2015)	0,56%
Fees	[SEE EURYDICE REPORT 2018/2019 – Country page attached]
Governance	
International students (% of total) (2018)	11,4%
Main international student origin countries	Germany, China, Romania (2018 – Educational Authority state agency under the supervision of the Minister of Human Capacity)

Number of Institutions in ARWU 2020 Top500	0
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7.2.3 The Hungarian context

Discourses in and of the higher education sector before the pandemic

In the period following the change of the communist regime, the state tried to reduce the direct influence on the operation of higher education institutions and tried to give more space to the institutions' own initiatives. However, this change proved to be only temporary. Since the 2000s, the government has been increasingly active in shaping Hungarian higher education. Following the change of government in 2010, the state increased the regulation and (re) centralisation of higher education with a sharp decline in institutional autonomy. This is shown by measures such as the constitutional amendment establishing the reduction of the organisational and financial autonomy of institutions, the appearance of government-appointed actors in the top management of institutions (chancellors, budgetary supervisors, government influence on the selection of rectors), the shift from formula funding to direct institutional funding, the radical reduction of the role of buffer organisations, and the strong top-down reorganisation of the network of higher education and scientific institutions (mergers and demergers, reorganisation of the Hungarian Academy of Sciences).

The government explained these measures by the wish to increase the labour market relevance of higher education and the efficiency of institutions. Thus, the pandemic hit Hungarian higher education at a time when the dependence and vulnerability of institutions on the government was very strong.

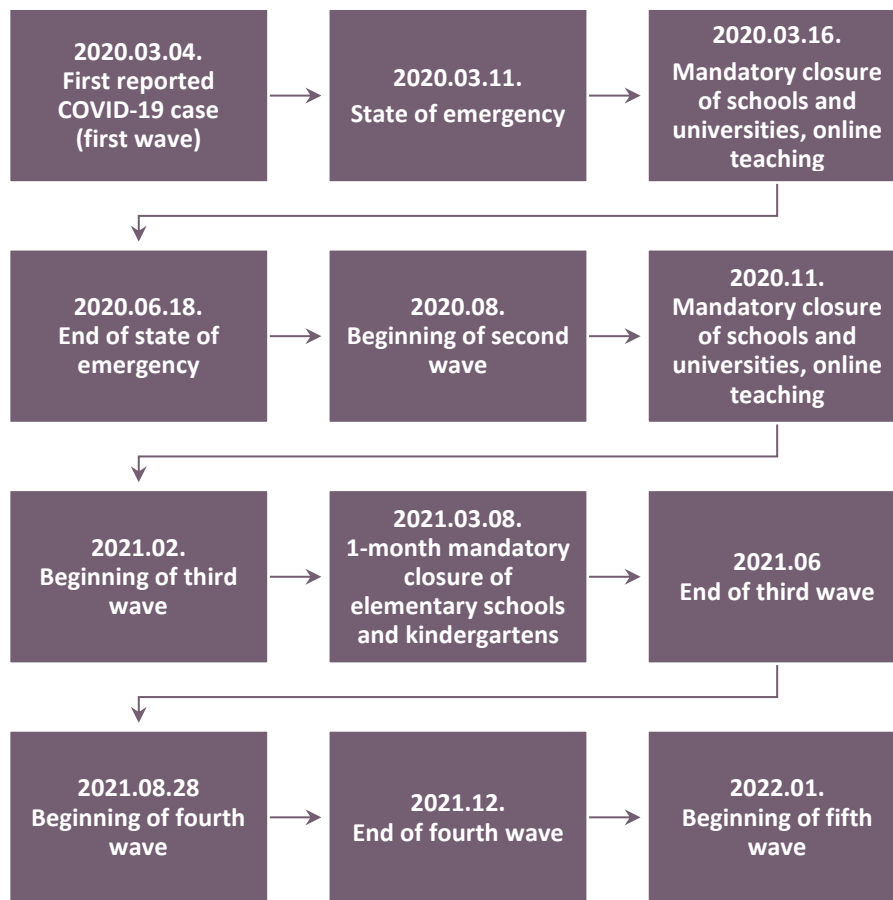
Discourses in higher education in the pre-pandemic years were partly dominated by related topics. The most visible discourse was the so-called "model change." Model change is the process by which public higher education institutions are transformed into institutions maintained by private foundations. This process started in 2018 with a pilot model change of four institutions. During the epidemic, the process accelerated, and additional 17 public institutions were transformed. As a result, the proportion of students in non-public higher education has risen from 10-15% to 80%. According to the government, the model change will increase the independence and autonomy of higher education institutions, improve the poor

wage situation and allow for a more favourable regulatory environment. At the same time, critics say the process predicts a further decline in the autonomy of institutions, as boards of trustees (rather than the institutional senates) have become the supreme decision-making body on all important issues related to the functioning of institutions. The boards of trustees include a large number of actors working in or dependent on the current government (e.g., ministers, secretaries of state). In this way, actors in the current government can retain control over higher education even in the event of a change of government in the future because boards are fully independent of the state.

7.2.4 The Pandemic in Hungary – 2020-2021 – overview and timeline

The COVID-19 pandemic hit Hungary in early 2020 (see timeline below). The first official measurements (like social distancing, limiting outdoor activities, closing down public places etc.) were introduced in March 2020. The lockdown of the universities started on 12th March 2020. All institutions had to work out an action plan until 16th March. Based on these, the ministry responsible for higher education provided sectoral proposals on 18th March. This was followed by other governmental regulations regarding diplomas, the spring semester, exams, etc. The opening started in April, but only from 18th May 2020 could the rectors declare the opening of the institutions for the students. In the autumn of 2020, the semester started with face-to-face education, but the online part was kept alive to provide lectures and classes for those affected by the pandemic. However, in November 2020, the second wave reached a peak point, so the second closure was issued. The spring semester (third wave) in 2021 started fully online, and only at the end of spring, during the exam period, could the higher education institutions open their doors to students if they wanted. During the fourth wave, no mandatory closures were issued; the higher education institutions decided on their own rules and instructions, like wearing masks, or online classes in lectures for more than 50 students etc.

Timeline of the pandemic situation in Hungary, 2020-2022



If we look at the general feelings and attitudes toward this special situation, we can see that in the first wave, there was general cooperation, collegiality, and patience among all stakeholders independently from role and responsibilities (leaders, staff, academics, students etc.). During the second and third waves, this gradually started decreasing as the suddenness and emergency features of the situation evolved. It has not diminished totally even during the third and fourth wave, but there is a general weariness and growing impatience.

We have to emphasise that our data-gathering (the interviews) took place in spring 2021. Accordingly, our results mirror the experiences of the first two waves and the initial shock, not the third and fourth wave, when the higher education institutions, the students, the teachers and staff more or less accommodated themselves to the pandemic circumstances.

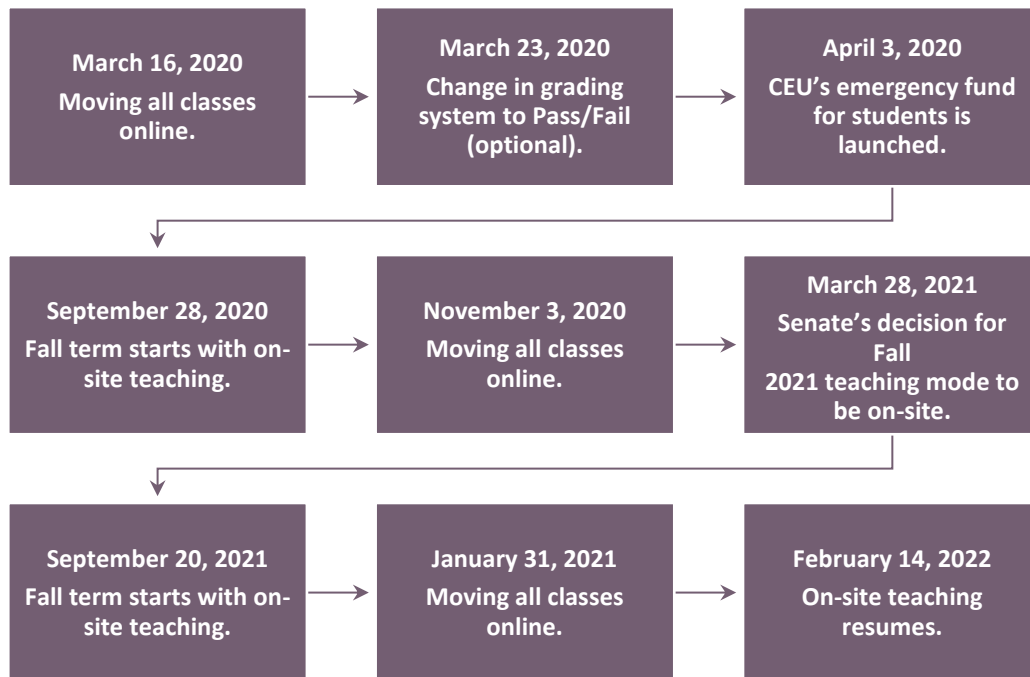
7.2.5 The specialities of the research

There are some particularities related to the Hungarian situation and the involved institutions. As we mentioned above, the Hungarian higher education sector was in the middle of a so-called ‘model change’, when the pandemic started.⁵³ This affected the three universities in different ways:

- The Corvinus University of Budapest was the first and pilot university in Hungary to the model change, starting in 2019. Accordingly, CUB was in the middle of the transformation when the pandemic hit the country. Therefore, at this institution, the adjustments and revisions were related both to the model change and to the pandemic.
- In the case of the CEU, a special political upheaval resulted in moving the main campus to Vienna from Budapest during 2019-2020. As it can be seen, the pandemic occurred during this change of place between countries, which further complicated a rather complex and difficult situation (see timeline below).

⁵³ In the so-called reform process of ‘model change’, which started in 2019, public higher education institutions become private institutions and come under the supervision of newly established private foundations. The reforms aim to improve the competitiveness of the institutions by providing a more flexible operational framework. The boards of trustees of the foundations are given a great deal of freedom in determining the framework and operation of the institution they maintain. A part of the process, academic and non-academic staff will lose their public servant status and become regular employees. In terms of the size and impact, the model change seems to be one of the most influential governance reforms of the period following the change of regime in Hungary in the 1990s, as a result of which the sectoral and institutional governance structure of higher education has changed fundamentally.

Timeline of the CEU events between March 2020 and February 2022



Budapest Business School in spring 2021 was not involved in the model change (yet); however, being a mainly vocational applied university, the labour market difficulties affected this institution the most, especially the tourism and hospitality education.

Regarding the limitations of our research, there are two aspects we should mention. First, there is a disciplinary speciality of our research. Namely, the involved higher education institutions are all from the field of business, economics, and social sciences. This will somewhat limit our comprehension in relation to those disciplines where on-site training and real-life practice are part of the daily education (e.g., medicine, art etc.). Second, our research is somewhat limited geographically because all higher education institutions are in the capital city (in Hungary and partly in Hungary and in Austria at CEU).

7.3 Sustainability of higher education systems

7.3.1 Policy and funding priorities

The opinions differ slightly in relation to the governmental answers to the pandemic situation. On the one hand, there is a general opinion that the government reacted on time, closed the institutions on time and gave instructions and guidance on how to handle the epidemic. They were also cooperative (e.g., the Rectors' Conference was on a direct hotline with the ministry). On the other hand, they limited the room for manoeuvre of the institutions, which became very dependent on the ministry. However, the ministry did not provide professional help to establish professional groups, which could have led to better quality recommendations and guides.

Nonetheless, there were bottom-up initiatives to share the practices and experiences among institutions and stakeholders from the official level (e.g., the Hungarian Rectors' Conference made special efforts to collect and share the different coping strategies of the universities and their further demands) to the personal level (e.g., Facebook groups to share online teaching practices, earlier research projects and good examples, new gadgets and so on).

All in all, the sector resolved the transition in spring, and there was strong solidarity in the system. Everybody takes their responsibility very seriously, and large crowds of students were not left unattended, even if the level of care they received differed. However, it is obvious that there is a need for further discussion about the changes the pandemic brought into the higher education sector. The stakeholders have to start thinking about what to digitise and what not.

The epidemic influenced the discourse surrounding the higher education sector in two ways: on the one hand, the attention of the public shifted from the 'model-change' to other issues, and on the other hand, the possibility of demonstrations and similar protests as part of the epidemic protection ceased (e.g., the teachers and students at the University of Theatre and Film were unable to continue their active resistance). Thus, the epidemic situation enabled the government to implement a reform that would otherwise have provoked greater protest and resistance.

7.3.2 Internationalisation

An important discourse before the pandemic was the internationalisation of Hungarian higher education and the increase in international students. This has been fuelled by scholarship programs supported by the government (e.g., Stipendium Hungaricum). These programs aimed to increase the capacity and ability of the institutions to attract international students. COVID-19 made institutions aware of the limitations of internationalisation efforts.

The switch to a fully online tuition resulted that the international students felt more isolated from the Hungarian students. They sent a lot more emails to their teachers than before. However, their real feelings were hard to identify during online meetings, as this is very challenging to recognise attitude through the screen. (leadership)

The universities reacted slowly to international ‘immobility’. Faculty and staff members regretted cancelling trips, and the events were conducted online. Internally the focus was on the move to fully online delivery of classes, and the support for international students and staff who could not travel home due to the pandemic came only later. Some extracurricular events were provided online by each university, but overall, the communication with international students was assessed as poor, and this caused further anxiety and stress for these students.

COVID-19 revealed the limitations of internationalisation based on international travel. Interviewees raised the issues of financing internationalisation activities after the pandemic, competing for students, and the need for materials and communication channels available online in English. Internationalisation is still regarded as very important and valuable, but how the universities will exactly adapt to the post-COVID-19 world expectedly requiring online activities is yet to be seen.

7.3.3 Differences within the sector

The main reactions to the pandemic situation were very similar among the case study institutions: the government imposed the ‘emergency condition’, and the higher education institutions followed the regulations. Furthermore, as the collected materials indicated, the Hungarian higher education institutions followed the governmental instructions and shared

their practices through formal (for example the Hungarian Rectors' Conference) and informal channels (e.g., Facebook groups).

Some differences in the total closure terms occurred due to the specialities related to given studies and practices, typically those requiring the personal presence and manual exercises (everything from medical to hospitality studies).

7.3.4 Inequalities in the sector

Regarding the inequalities in the sector, three aspects were mentioned at our case study universities: parenting, age and chronic illness.

Regarding parenting, home-office difficulties were more explicit for academics and staff with underage children at home. On this topic, gender division is another angle of the problem. However, the general impression at our case study institutions was that the difficulties were connected to parents of both genders, not restricted solely to the women.

As for the inequalities related to age, the rapid digital transformation of teaching led to the loss of some of the eldest teachers, who couldn't or wouldn't undertake the tasks related to this new endeavour. However, in some instances, the elderly teachers were eager to learn the new technics and devices from the younger colleagues and the students. For example, one academic said '*There were older colleagues, who were active and were able to catch up*'. Therefore, not age in itself was necessarily the cause of some early retirements.

One aspect, however, was new, namely, the limitations of the working possibilities of those with some chronic illness, which didn't cause any problem before. The pandemic resulted in a higher burden on them because they had to remain at home from the first moment until the end of the pandemic. This meant higher pressure and stress on them and required higher flexibility and understanding from their colleagues and leaders. As one librarian recalled,

For those colleagues who have some chronic illness, there was huge despair at first. They were afraid even to step out from their homes. This provided extra pressure on the others. But in time, we all have learnt to live together with this constant feeling of threat.

Most of our interviewees expressed the opinion, that gender inequalities do not appear as a determining problem during the pandemic. Rather age and, in some cases status played more of a role.

I have not met with any gender inequality problems. When any discrimination occurred, it was related to my age and low status. ([female] academics)

All in all, we can see that although the pandemic situation led to top-down rules and measures, bottom-up initiatives also permeated the higher education sector. We could not find fundamental changes in funding issues and international context, although internationalisation remained high on the agenda. Regarding the inequalities, three aspects seem prevalent: parenting, age and chronic illness.

7.4 The purposes of higher education institutions in society

7.4.1 Science

As a result of COVID-19, discourses on the changing role and authority of science in society started in Hungary, but they remained less visible. Some participants predicted a rise in the credibility of science, while others took a more sceptical view based on the strengthening of pseudo-scientific anti-vaccination movements.

The positive public perception of science was reinforced by a discourse about the work of Katalin Kariko, a Hungarian-born scientist who played a major role in developing the MRNS vaccine. The Hungarian Academy of Sciences also attempted to draw attention to Hungarian research results on COVID-19 (e.g., they collected research results on a separate website). But universities as institutions, with a few exceptions, played a minimal role in the public discourse on COVID-19 or the role of science. The government did not rely on universities or the Hungarian Academy of Sciences to respond to the epidemic, so institutions did not receive much public visibility. Some academics were invited to participate in government working groups, but their research received limited media coverage for confidentiality reasons.

Universities rarely initiated comprehensive research on COVID-19 on their own. University research, in general, was hampered by the fact that the conditions of teaching changed very suddenly with the introduction of online education. The transition took time and energy away from research, especially in the early period of the pandemic. Furthermore, the conferences were postponed, and then later, many were cancelled or held online, significantly hindering the networking potential and knowledge-sharing among academics worldwide.

Even when comprehensive research programs on COVID-19 were launched, they received little media attention. One exception was a medical university, whose rector not only took a very active (pro-governmental) role in the media on COVID-19 but also initiated and coordinated a national study on the spread of the pandemic (the results of which were later widely discussed in the media). Other universities have tended to appear in the media through their researchers/experts (usually a virologist or epidemiologists).

Overall, the public perception of the role of science and higher education does not seem to have changed significantly due to COVID-19, except maybe the medical science and its importance and reliability.

7.4.2 Education

Overall, it can be stated that the discourses in higher education as a result of the epidemic did not change significantly. No new discourse appeared, but some topics were strengthened (digital learning) or given new interpretations (internationalisation).

Finally, it is also worth noting that although collaborations and networks play an important role in domestic and international higher education discourses, universities were forced to answer one by one. Both our experts and the interviewees at leadership report about institutional-level answers, programs, and solutions. There was very little initiative to team up and respond collectively.

A further very important result of the pandemic is a general turn towards pedagogical issues. The pandemic revealed the social aspects of teaching, the topic of care (care of students, care of teachers and staff), and the importance of working out what type of teaching and learning is

working in different contexts (from large online lectures to personal in-person groups). This issue should be systematically addressed, not by individual institutions and teacher groups in order to provide a better higher education in Hungary.

7.4.3 Labour market

Regarding the relationship between higher education and the labour market before the pandemic, the government has defined the role of higher education in meeting labour market needs and strengthening innovation. This has been reinforced by introducing programs such as (German-style) dual training.

Before the epidemic, the labour market was saturated. A significant proportion of full-time students worked during their university studies, and companies sought to build closer relationships with institutions. However, the epidemic also had a strong impact on the labour market. It hit especially hard those sectors connected to tourism and hospitality (one of the main areas at BBS) due to the full closures and distance measures. Furthermore, not only the higher education institutions, but the companies themselves had to change their operations and introduce home offices and other strict rules.

Accordingly, the COVID-19 situation affected the relationship between the universities and the labour market as well. This change occurred at two points: the companies have disappeared both as partners and as employers. This led, on the one hand, to increased interest, for example, in continuous education, because students are more willing to focus on their studies rather than try to find work. On the other hand, the companies struggled with their problems and crisis management during the pandemic. Therefore, they turned their attention to themselves, not to the higher education sector. This manifested not only in their lack of financial support but also in the lack of internship opportunities and places. The hiatus level varied from field to field, smiting hardly those industries affected mostly by the pandemic (for example, hospitality and tourism).

7.4.4 Relations with society

As we mentioned before, the general discourse in and about higher education has not changed significantly. However, we witnessed a growing number of academics in media addressed as

experts – typically from medical fields. As Hungarian medical higher education is quite a high level, it was natural to turn to the leaders and experts of these institutions. This seemed to strengthen the trust in the academic profession as experts. However, when vaccination started, this has started to be interwoven with some political messages (vaccination policies).

Future of higher education

Regarding future pathways of higher education, fully online education is not widely discussed in Hungary, even though every higher education institution was educated online during the pandemic. In this topic, the question of higher education without campus does not appear at any system-level thinking; only a few respondents met with the idea. Nonetheless, based on the experiences during the pandemic times, everyone has an opinion about it. The general impression is that higher education is not imaginable in a fully online manner. Even where, rarely, fully online education could be imagined, it was not thought desirable or would require a significant change in attitude. As one university leader put it, *it is a question of habit whether we can accept a fully online university or not.*

However, there is a general agreement that higher education will not return completely to its old form. Still, there will be a shift toward some kind of hybrid version, where online forms complement live communication and education. None of the higher education institutions plans to move in scale toward online education. However, at all institutions, the thinking and scanning have started to find those aspects, processes and initiatives which can be kept after the pandemic. One leader made clear that *‘digitalisation cannot be stopped, we need to embrace it and do it well.’*

Nonetheless, the opportunities are not the same in different disciplines because in many disciplines, fully online education is not possible (e.g., medicine, veterinary sciences, artists, physical education etc.). Furthermore, there is a difference between part-time and full-time education, where the latter requires more time at campus and a higher level of personal involvement. At some institutions, which are highly international online education could be even less favoured, like in the case of CEU, where personal contacts and shared experience are engraved into its core mission. One leader expressed this clearly:

CEU shouldn't be completely online, because one of the major points is meeting people from all over the world, in a safe, tolerant environment. It would limit the CEU's idea.

Regarding the level where more or fully online education can be imagined, the opinions vary: some said that it is more likely at a higher level (like MA), while others emphasised that especially at the MA and PhD levels, the personal involvement, research and networking made online education less desirable.

Furthermore, there is a general agreement among teachers and educators that even if some part of the education could be outsourced to online forms, the personal contact part will remain. It is important not only for the teachers but for the students as well. An academic expressed this as follows *'I need a live encounter with students'*, while a student said, *'if such online environment continues, students will give up on higher education because they need to sit all day and work with a camera, looking at themselves'*.

The need for personal contact is not reduced to teacher-student relationships but is equally important to everybody at every level: *'we are social beings; we need personal relationships'* (librarian). Naturally, there are functions and places in university buildings that are closely related to teaching and research, like the lecture halls and classrooms for lectures and seminars or the library for intense research. But there are other spaces in the building with other functions. For example, there is the teachers' coffee room for informal or semi-formal meetings, and the dining hall where lunchtimes are an occasion for administrators and leaders to talk informally and share their experiences.

Therefore, the campus is not only about education but about community life as well, which is important and should be preserved. Furthermore, networking is a key aspect of higher education at every level, from students to rectors, and it is not working quite as well online as in person.

Another important aspect is that higher education without campus is not only about online education but fully online operation. Regarding this venture, the opinions are very similar. That is, the good experiences and initiatives should be maintained, like some new forms of communication between faculty, students, and prospective students, and advancements in paperless administration. Nonetheless, a fully online operation would require a total change in

attitude (i.e., trust workers at the home office) and in all of the processes and human relation aspects of the work at a higher education institution, including the health risks related to it.

All in all, there is a shift to include more online forms into the everyday operation of higher education institutions, both on the staff side and in education. There is a niche for online teaching and learning, it can be a tool for access. However, the ‘going international from home’ option is an opportunity and a threat simultaneously (why not choose Sydney instead of Szeged [Hungarian city] if I do not have to move out of my apartment). Furthermore, during the pandemic, everybody experienced the psychic and health effects of a fully online life without face-to-face meetings, informal chats and lively discussions.

We have to be aware of the possibilities of online operation, like in the following case:

online medium can have the benefits of allowing for experiences that otherwise would not be possible. For instance, I was able to contribute to a course in a refugee camp in Kenya while sitting in Vienna. (academics)

However, at the same time, we should not forget that higher education is not only about knowledge transfer and skill development, but socialisation, community involvement, learning social norms and building lifelong networks. This requires a place to go and be together. As one student said, ‘*When I say school what do you imagine in your mind? You are imaging buildings.*’, but another highlighted the life within these buildings, ‘*When I think back, it was always an honour to go to university [...] There is a feeling there.*’

In summary, it is clear, that in scientific research, good initiatives and cooperation featured the Hungarian academic field, but they focused mainly on medical answers and solutions to the pandemic. The general discourses in higher education did not show any significant change. However, there was a general turn towards pedagogical issues (details later). Concerning the labour market, the disappearance of companies both as partners and employers put a strain on higher education, especially in business education. However, the level of hiatus varied from field to field (e.g., hospitality and tourism). Regarding the future of higher education, our interviewees have the unanimous opinion that it is not imaginable and not desired in a fully online manner. However, they agreed that academic life would not return fully to its old form completely, but there will be a shift toward some kind of hybrid version.

7.5 The workings of higher education institutions

7.5.1 Distance and online education

The epidemic understandably made the discourse on e-learning and distance learning topical. This has been present in Hungarian higher education to a small extent, mostly as a topic related to teaching and learning in higher education, but overall, there were only sporadic experiments in Hungarian higher education. The epidemic, however, intensified the discourse: the epidemic has made universities aware of the need to address digital education and proctoring. But the discourse on digital education is undifferentiated, and it might fade in the future. There are several reasons for this.

On the one hand, there is a lack of sector-level coordination. There is no research on digitisation at the sectoral level. There is no consultation on the policy level either. As one of the interviewees noted: *'there have been no examples of such consultations in the last 10-15 years'* (expert). During the epidemic period, policymakers provided only apparent support or guidance regarding digital education. Institutions mostly struggled with the challenges themselves. According to one interviewee, the situation was similar to that in public education: *'I manage the tip of the iceberg to make the iceberg beautiful, but the basics aren't tidy.'* (expert)

On the other hand, in the context of current practice, misconceptions or a false sense of confidence can easily appear. If this is digital education (what we did), then we can do it. Yet, the current practice, which is mostly based on recording videos and sharing written texts, is cumbersome. There is a lack of reflection on how digital tools fit into the learning process. For example, thinking about *'what the function of the lecture is.'*

An important aspect: pedagogical change

The Transition

When it comes to the pedagogical changes during the pandemic, the emerging pattern is one of adequate adaptation that was plagued by initial confusion and increasing online fatigue. The three universities indicated having implemented sporadic online activities before the pandemic and having the relevant IT infrastructure in place. However, there was no strategic anticipation

for an emergency of that scale. That created some confusion at first (for example, a fluctuation at BBS between synchronous and asynchronous modes of teaching) before things started to run smoothly again. As described by a teacher from BBS, ‘by the third semester it has become the new routine.’ Universities also had to invent new ways of doing many processes such as managing these supervisions and defences, organising conferences and seminars, designing social events, organising internships for the students, etc.

Meanwhile, a pedagogical model based on offering graduate seminars for small groups of students (as in the case of CEU) made the transition much easier, supported by adequate IT infrastructure. This shows why it matters to be ready with the relevant tools in emergency situations:

Historically, our faculty has been against the idea of online teaching. However, we discovered we have almost everything we need in terms of infrastructure to do everything we need. (leadership)

Students, faculty, and leadership have conceived the absence of direct social interaction amongst students and between students and faculty as one of the major drawbacks of this online pedagogical mode. However, continuing different teaching and learning activities during the pandemic was seen as a positive thing that allowed for keeping in touch with the wider community (whether teachers or students) and offered a convenient solution during the pandemic.

Teachers’ Experience

Teachers were not fully equipped for the transition at the beginning (both technically and pedagogically), especially the older age groups. Time pressure played a role by not leaving much of a space for slow-paced adaptation. Teachers had to invent and experiment with the support of their IT and teaching and learning units. Having a set of digital tools and granting faculty the flexibility to choose from while designing and teaching their courses was found to have a good impact on delivering quality online instruction with minimum central intervention. Teachers were also allowed to choose their own pedagogical strategies; synchronous and asynchronous teaching, designing in-class activities, sharing pre-class written material, running online discussions, inviting guest speakers, etc. However, teachers still believe that the quality

of instruction has been compromised. As one academic said, *'we had the experience that you cannot do as much in the online class as you would do in a live one. The curriculum needed to be simplified.'*

The teaching and learning centres, such as TDTK at Corvinus and CTL at CEU, played important roles in facilitating the transition through counselling, capacity development activities, and advising on the use of digital tools. In this online environment, teachers were required to claim the roles of facilitators and mentors more than ever before. As one student put it *'Teachers were no longer perceived as the main source of knowledge.'*

For some teachers, online teaching was an opportunity to develop their course design and planning skills. As one academic said: *'I became interested in planning learning activities just because of online education. I realized that when I taught face to face, I did it catastrophically!'*

However, it has also become generally more difficult for teachers to prepare for their classes, trying to find creative ways and techniques to keep their students motivated and engaged throughout the sessions.

In the online space, impersonality is a big problem. You can't pay attention to everyone. Students attend classes with cameras not turned on. Students are often inactive; they are very difficult to address. Enforcing interaction is very difficult. Students go lazy if there is no camera. (academics)

Additionally, the students' examination process has become particularly challenging during the pandemic, especially at Corvinus, where the assessment process using Moodle and MS Teams has been described as 'very bumpy'. There was also high suspicion, especially amongst Corvinus and BBS faculty and leadership, that some students cheated in their exams.

It was hard to manage exams: what if everybody completes the exams now, while before the pandemic half of the class had failed it?! (academics)

That was accompanied by a general feeling that students' evaluation and accountability needed to be milder.

We don't have to save the world now. Everyone must be allowed to pass. (academics)

Students' Experience

This new online pedagogical approach has put pressure on the student to self-motivate, exert effort to maintain their attention, consciously manage their time, and overcome their shyness to participate in online discussions actively. That was evident by a pattern of online fatigue that had increased between the start of the pandemic and the Spring semester. Also, conducting group projects during the pandemic has become harder than ever before. Students were also able to get a sense of the extent to which a teacher has prepared for his/her class:

Two are two main types of teachers; the ones who would like to develop their skills and support students, and the ones who would not like to put much effort to online education, and just uploaded the material and did not organise live consultations. (student)

Meanwhile, students and teachers meeting in those virtual spaces has also brought a certain level of intimacy and personal approximation among them.

When we are at the University, teachers are standing in the pulpit, but during online education they are just cubes on the screen, just like us. (student)

Positive Spillovers⁵⁴

One of the positive impacts of the pandemic was an increased pedagogical and digital awareness among faculty and students as a result of breaking many psychological barriers to online education. The pandemic has also created pressure to accelerate some of the ongoing IT projects such as the introduction of O365 in Corvinus, in addition to increasing the familiarity of the teaching staff with many existing digital solutions and enhancing their online pedagogical approaches. Universities also had some valuable IT assets that, as in the case of BBS, were underutilized up till the pandemic.

⁵⁴ Positive spillover is a phenomenon which describe positive transfer and beneficial effects from one domain of life to another. These could be related to skills, behaviours, or even values.

The Way Forward

However, the uncertainty about the future of online offerings remains. The question now is whether, in a post-COVID-19 world, these universities will continue the discussion on the best way forward by capitalizing on faculty and students' knowledge, infrastructure, and experience in running an online teaching and learning process.

7.5.2 Work of academics and support staff

An important aspect which became apparent due to the COVID-19 situation is the topic of work-life balance and the different health issues of the students, academics and staff. This topic was not addressed systematically before, even if there were initiatives and projects at various institutions. This is a question which should be addressed in the future.

In Hungary, there were contradictory feelings among academic and non-academic staff related to the home office system. On the one hand, teachers were mostly unhappy because they found online teaching less effective, and they felt like they were speaking into the void as students did not turn their cameras on. Next to the teachers, non-academic staff has also complained about issues in connection with the internet connection or IT devices. Additionally, home office with small children was also a huge challenge for them as well.

Streaming with small children is extreme sport. (academics)

Depending on the actual restriction related to the operation of schools and kindergartens, was a workday for academic and non-academic staff easier or harder. Finally, there were several new rules, roles and messy procedures for administrative staff, which damaged their work-life balance of them, and the IT staff could not have a balance at all as well, as they had to learn, build and operate the systems simultaneously. Years-long IT projects had to be done in days with a small base to build on, and it caused major reorganisation within the IT groups. This dependency on IT services increased the priority of IT departments at Hungarian universities. On the other hand, there were employees, who were happy, as they could work from home because they could keep the same routine every day and enjoyed that they did not have to travel. A teacher from Corvinus said, that the changes by COVID-19 are beneficial for almost everyone.

The Gender Equality Committee at CEU paid special attention to handling the issues in connection with the work-life balance of academic and non-academic staff.

The home office system has raised other issues next to the work-life balance. Handling the problems related to the library services was not a priority in the case of Hungarian universities. However, there were several new inquiries and new types of problem-related to it (e.g.: Librarians had to find tasks that colleagues could do from home, organising training for teachers, providing new services, etc.). Furthermore, colleagues (especially elder colleagues) needed a lot of support, which resulted in slower and sometimes more complicated working processes.

However, it also has some positive effects, just like less paperwork for staff and students as well, many things, which were available only in offline format are available now online (e.g., some registrar departments' services). Next to this, teachers received many bits of help from, for example, the IT department and the Centre for Teaching and Learning at BBS.

In Hungary, the home office system was rigid before the pandemic, and there was a huge resistance against it from the leader level despite the fact, that it would have been possible. During the COVID-19 situation, leaders had the chance to gain experience related to working from home, and their trust increased. Thanks to these positive experiences, this system is flexible now, and several things occur in digital form only.

7.5.3 Duty of care

The duty of care for students seems to have been elevated at all Hungarian institutions. An expert interviewed noted that the social sensitivity of higher education institutions was generally weak in Hungary; "institutional policy on dropping-off or lagging students has been lacking so far, but it has now become more visible". The pandemic seems to have made more visible the students from disadvantaged backgrounds, whose struggles were more thoroughly examined by faculty and university leaders.

Among the measures taken to help students in need were: 'hardship funds' like the ones introduced at BBS ('rászorultsági támogatás'- a one-time financial support per semester, based

on the decision of a committee) and CEU; the extension of accommodation in dormitories; introduction of thesis submission extensions and the pass/fail to grade; and masks and hand sanitiser distributed to students on campus.

Several categories of students were flagged as particular cases for concern and increased care. First, as an expert noted, first-generation students were at increased risk of depression and feeling detached from the university community. Second, international students who were away from their families and support networks, struggling with the double uncertainty of their lives and those of their families, needed increased support (both psychological and logistical-financial). Third, the doctoral students who were already isolated due to the solitary nature of their work missed the formal structure of meeting colleagues and faculty. Moreover, the doctoral seminars and discussions are an important part of the doctoral experience and a new way of replacing this needed to be found.

As a CEU faculty mentioned, many felt that the pandemic brought students and faculty closer, that it humanized them in the other's perception:

we were looking into each other's living rooms, sometimes the struggles were right there in front of you-students not looking their best, worried for families, for themselves, it was impossible not to care. (academics)

The duty of care was present in all Hungarian institutions with the cause of students from disadvantaged backgrounds being brought to the forefront. Resources were deployed for students needing additional support, although it is not possible to estimate the extent to which these needs were satisfied by the measures put in place.

The special case of international students

For the state-funded universities in Hungary, the international students were not prominent on the pandemic management agenda, due to their limited numbers when compared to the national students. Interviews conducted at these institutions show causes of concern around the following issues:

- Lost revenue from study abroad students (not from Erasmus schemes) was noted as significant by one state university.

- The attempt to move mobility programs online encountered challenges around timing for online courses (offered to students located in opposite time zones- US and Asia) and availability of pedagogical resources (the Youtube channel, for instance, is unavailable in China)
- Internal resources allocated for international students were linked mostly to extending accommodation and were limited in other areas, particularly around mental health support.

Handling international students' problems was secondary at Hungarian public institutions. Still, it was essential at the private institution included in the sample because international students form the overwhelming proportion of the student body. CEU worked with Student Council to map out issues and address them: it offered affordable housing during the 2020 summer and extended accommodation for students who could not travel, provided laptops and other equipment needed for online learning, created an emergency fund needed for students in hardship situations, increased mental health resources. A senior manager at CEU noted that:

We managed to help our students because we had the resources available and the senior leadership team immediately agreed to deploy these resources to help students; I know that other universities in Hungary and elsewhere struggled because they did not have many resources to start withand they also lost money from potential students and from other activities. So I think we did much better than other universities because we were very lucky to have funds we could access immediately but also because we really care about the well-being of our students, it's in our institutional culture in a way. (leadership)

Despite available resources, several important issues were flagged by students and CEU university leaders as lagging. These include the limited access to medical care (including psychological support in English) due to the medical infrastructure in the country being stretched by the pandemic and particularly the uncertainty issues around relocation to Austria and the Austrian visas. The university had decided in May 2020 that in-person instruction would start on the Vienna campus in September 2020. However, due to measures in place to limit the spread of the pandemic, many Austrian consulates and offices worked at a limited capacity, and this led to many students and staff experiencing visa problems. While not directly caused by the pandemic, this situation was mentioned by all CEU interviewees as a major cause

of anxiety and uncertainty for international students (with many not being able to travel to Vienna at all during the 2020/21 academic year).

To sum up, international students received a lot of attention at CEU because they form the vast majority of the student body but were secondary on the agenda of public universities. While some of their struggles were the same across institutions (isolation and uncertainty about travelling home), others were specific to CEU due to the campus move which overlapped with the pandemic.

7.5.4 Governance and decision-making

Institutional management and governance issues

Interviewees' comments on institutional management and governance issues can be grouped around four major topics: changes in the role of management, changes in the content of decisions, the issue of control and monitoring, and changes in administrative processes.

Many institutions were in the middle of large-scale transformations and changes when the epidemic appeared (e.g., becoming a private university, moving the university to another city). In these cases, it is difficult to separate the effect of the pandemic on institutional management from the effects of these changes.

The pandemic required the development of a number of new regulations and policies in a short period of time, which strengthened the role of top management. Although there were universities where emergency scenarios had already been prepared before the actual closure of institutions in March 2020, overall, the epidemic raised a number of practical issues in most universities that did not have an immediately obvious solution. The first period was therefore characterized by "firefighting", that is, the main aim was to somehow maintain education. These included, for example, switching to online education, rethinking the responsibilities of teachers and students (e.g., whether attendance at online classes is expected), or resolving ways of taking exams.

In most universities, the established forms of decision-making have not changed significantly (for example, Senates continued to meet and make decisions), but the role of management in setting agendas and making propositions has increased.

The preparation of regulations, policies and guidelines required an intensive process of consultation with the various stakeholders. This might have taken place in existing bodies (e.g., the Senate) which have thus met much more frequently. In other institutions, a crisis team ("operational staff") has been set up, which includes managers from key areas (e.g., IT, vice-rector for education, teaching and learning centre, student services, facility management). And, of course, there were a number of ad hoc consultations with the coordination of managers.

Board meetings and consultation processes have been put online. Organizing meetings and attending required much lower transaction costs, so several reported an increase in the number of meetings (e.g., departmental meetings or senate meetings).

The perception of the changes in the decision-making process was very mixed among the interviewees. One of the interviewees (from a smaller institution) perceived the process as a more democratic, more inclusive decision-making process. There were also many (mostly from the faculty) who felt little involvement and required more information and experienced change as the centralization of the decision-making and the dominance of the top-down decisions.

The epidemic situation was an opportunity for the leader not to have to negotiate so much. (...) In the past, many people could veto processes, now there was none. (leadership)

Opinions were also divided on the assessment of the desired level of detail of the regulations. There were those who said:

Some regulations in the field of education were too detailed. This was due to an unjustified mistrust, a strong willingness of some managers to micromanagement. Other institutions tended to have only framework rules. (expert)

Over-regulation itself can be a source of uncertainty. For example, at one university in the fall of 2020, hybrid education was introduced, regulating when to teach online, when to teach on-site (live), and when to mix the two. One of the interviewees commented on this regulation as follows:

Let's not go into who now interpreted the rule right or wrong; I feel that the university (...) has not given any flexibility. (...) I think the university management was very control freak. It wants to tell me everything. Strict rules, intricately written regulations. I felt that sometimes, as a program director, I didn't even know what to do now in some subjects. Some institute meetings went with everyone asking me how to teach now? And then someone told us to look at the presidential regulation, I looked at it, and then I was unsure which part applies to me. (academics)

Others, on the other hand, felt that detailed regulation was indeed needed because it helps people find out what to do and what not to do in an unknown situation.

Strong regulation was needed because there were a lot of experimental trials. Many faculties thought that anything could be done. For example, a lot of feedback came that the classes were not held. The main goal was not to violate student rights. For example, the regulation was strong in the management of the examination period. (academics)

Some associated the feeling of over-regulation with the organisational culture of the particular university.

Compliance at the university is terrible. But the compliance of academics has been strengthened. (...) (We have) high teaching autonomy. We were not socialized to use unified corporate systems. (academics)

Where there was less consultation in the preparation of decisions or the environment was very heterogeneous for regulation to cover all cases adequately, regulation easily led to unrealistic situations, which raised the issue of freedom and compliance. Although many feared monitoring, in practice, managers were unable (and in some cases unwilling) to control the activities of faculties, they were forced to trust them. Institutions operated in a laissez-faire way: they regulated things somehow, and then everyone solved it as they could.

Hybrid education was expected in the fall. That was awful. In practice, everyone solved it as they knew/wanted. The institute was flexible in dealing with this. If you wanted to do something irregular, "Do it, but I don't know about it," the head of the institute said. (academics)

The weakness of control also stemmed from the fact that the primary consideration in the development of IT solutions was to maintain teaching and not to provide means to monitor activities externally. However, the trust and freedom stemming from the time of necessity that characterized the pandemic period was a one-time event. In the future, as the framework for digital learning consolidates, the tools of control will be institutionalized. That is, the "big brother" will develop in digital education.

Finally, it is worth highlighting the changes in bureaucratic and administrative processes. The processes themselves have often not changed (no process redesign has taken place), but some steps (e.g., approval and signing of decisions) have been brought online and simplified. The potential of digitalized workflow has become widely apparent, which might fertilize future endeavours to develop better IT solutions for administrative processes.

Data policy as IT issues

Data policy did not play a prominent role in decision-making and management during the first waves of the pandemic (the period our research focuses on). It could be due partly to the suddenness of the situation, and partly to the long-lasting contracts between universities and Microsoft, which provided contractual regulations and restrictions in the data policy.

In Hungary, all investigated universities officially used Teams for online teaching, which is a part Microsoft Office 365 software package. This was an evident choice, as the universities already have licences for this package, which included Teams as well. It was also easier for teachers and students as well to use only 1 platform for communication. There were limited functions in Teams at the beginning, but Microsoft upgraded it, and now it is providing a wide range of tools, which can be used during lectures. Additionally, students and teachers mostly like Teams, as it is user-friendly, flexible, reliable, and easy to access. The contract contains a data policy part, which says, all data (e.g.: user data, recordings, etc.) remain in the possession of the university, so universities do not have to pay extra attention to data protection.

However, there were teachers who applied other platforms (e.g.: Zoom, Google Meet). This has raised data policy issues, as the handling of personal data is not clear in the case of these applications. The universities do not have contracts with the service provider, so they cannot control for what purpose these applications use their data. At Corvinus, there were no sanctions

if teachers used other platforms to keep their lectures online. In spite of the strict data regulations, ethical issues were still raised regarding the recorded online lectures' copyright. At BBS the Ethical Committee handled the problem related to that. As a result of online teaching, there is a dependency on Neptun/Moodle and Teams now.

Next to the data policy, universities in Hungary had to face the issue related to the lack of digital tools. There were different reactions at the universities. One solution was that the university has provided IT tools only for their staff member. Another solution was that they provided IT devices for their students as well.

7.6 Conclusion and summary

Overall, the universities included in the Hungarian study, adapted to the reality of the pandemic by switching to online delivery, including in their international programs. Some adapted quicker due to the required technology being already in place while others experienced longer delays in adapting to e-learning. The Ministry's response played an important part in the preparedness and response of public universities to the crisis. Policymakers interviewed for this study acknowledged that the sector had been only partially prepared for e-learning, with limited attention and resources allocated prior to the pandemic.

At institutional levels, two issues stood up for the researcher team: the sharp turn toward pedagogical issues, which were less of a focus previously and the controversial experiences and expectations regarding the control topic, with different levels of trust toward academics and staff (in state universities). Additionally, the well-being of staff and students and the duty of care became central issues.

In terms of internationalisation, Hungarian higher education had been on an upward course for the past decade, with internationalisation being central to the discourse on higher education. When the pandemic hit, there was a mismatch between the expressed importance of international students and their actual treatment (lack of efficient communication and support) by public universities. The situation was better at the private university included in the study which had always operated with a duty to care approach to its students consisting primarily of international students. Overall, the study documents how difficult and anguishing the pandemic

and isolation were on international students and how many struggled in both public and private institutions included in the study.

Chapter 8 Ireland

Andrew Gibson⁵⁵, Ellen Hazelkorn⁵⁶, John Walsh⁵⁷

8.1 Overview of research conducted⁵⁸

Interviews				
National system-wide actors	2 interviewees from separate national academic representative bodies (INT01, INT02).			
	Case 1	Case 2		
Type of institution	<i>Large public research university</i>	<i>Large public university of applied sciences (previously a number of smaller institutions)</i>		
Total number of interviews	4	5		
Top leadership	-	1 (INT07)		
Middle leadership	1 (INT03, vice dean level, also academic)	2 (vice dean level INT08, and former department head also academic INT09)		
Administrative staff	2 (from both social science INT04 and science INT05 faculties)	1 (INT10)		
Academics	1 (INT03, also middle leadership)	2 (INT11 and INT09)		
Students (individuals or group interviews?)	1 (INT06, a Student Union officer)	-		
Other data (specify (e.g. Documents, media analysis)	Academic literature, newspaper articles, HEA data.			

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⁵⁶ CAVE Research Centre, School of Education, Trinity College Dublin, Ireland

⁵⁷ BH Associates, Dublin, Ireland

⁵⁸ A total of 11 interviews were undertaken by all three authors, between 27 October and 2 December, 2021.

8.2 Country profile

8.2.1 Basic data about Ireland

Population (2021)	5,011,500
Unemployment (2021)	5.2%
GDP per capita in PPS (2019)	191
COVID-19 caused GDP drop in Q2 2020	-6.1%
Gini (2018)	28.9
Human Development Index (2020 report)	0.955 (2)
Government form	Unitary parliamentary republic
Political orientation of the current government	Conservative (centre-right coalition of Fianna Fáil and Fine Gael)

8.2.2 Characteristics of the Higher Education system⁵⁹

Population of students (2021)	245,663
Tertiary education attainment (2019)	55.4%
Student-academic staff ratio in tertiary education	<i>No data available</i>
Number of higher education institutions (2022)	16 public higher education institutions across a sector comprising 7 universities, 3 technological universities, and 7 institutes of technology (IoTs). These institutions all can offer qualifications up to level 8 on the European Qualifications Framework (level 10 on the Irish National Framework of Qualifications).
Public spending on tertiary education as % of GDP (2015)	0.60%
Fees	Undergraduate education in public higher education institutions is covered through the so-called ‘free fees scheme’ (postgraduate education is not included) whereby undergraduate students costs €3000 under what is called the ‘student contribution charge’. ⁶⁰ A comprehensive grants system is administered through SUSI (the student grant

⁵⁹ Note, the following data applies only to public HEIs. There is a sizeable private HEI sector that – while regulated – is not obliged to provide data to the Higher Education Authority which has a reporting responsibility for data relating to public higher education. The Higher Education Colleges Association (HECA), an association of a number of private higher education providers states that its member HEIs have c. 27,000 students, equivalent to 11% of the public numbers. Students attending private HEIs pay full costs of their courses, and are not eligible for SUSI grants.

⁶⁰ <https://hea.ie/funding-governance-performance/funding/student-finance/course-fees/>

	<p>scheme), through (i) fees grants and (ii) maintenance grants.⁶¹ It was estimated in 2020 that half of 18 and 19 year olds in further and higher education were in receipt of some grant aid.⁶² Students from EU member states, states which are a contracting state to the EEA Agreement, the Swiss Confederation, the United Kingdom, and various other groups are also eligible to study in Ireland through the ‘free fees scheme’.⁶³ International students from outside these groups pay ‘full fees’, from €9850 - €19,500 for Arts and Humanities or Business, up to €39,500 - €55,000 for Medicine. See Appendix 8.8.2 for further detail (Eurydice data on Ireland).</p>
<p>Governance</p>	<p>- The Department of Further and Higher Education, Research, Innovation and Science (DFHERIS) is responsible for the overall policy and funding for further and higher or post-secondary education and training. DFHERIS represents the first time that further and higher education and research have all been brought together. In 1971, the Higher Education Authority (HEA) was established on a statutory basis to lead the strategic development of the Irish higher education and research system and to oversee, monitor and fund public higher education. The HEA is a classic intermediary body in international public administration terms – in this case intermediary between the government and the higher education sector. The Irish Research Council supports research across all disciplines, including doctoral and post-doctoral funding, and falls within the remit of the HEA.</p> <p>- The past decades have seen the development of the regional technical colleges/institutes of technology now transitioning to technological universities as per 2018 legislation. In 2011 the <i>National Strategy For Higher Education to 2030</i> was published. Foremost among the reforms was establishing a new relationship between the HEA and publicly funded higher education institutions, based on performance compacts and a focus on outputs/outcomes over inputs. The funding role of the HEA, which forms the backbone of its 1971 legislation, therefore took on a much enhanced and expanded system- performance role. The Higher Education Authority Bill 2022 is currently progressing through parliament. It</p>

⁶¹ Phulphagar & Kane, 2020.

⁶² <https://www.irishtimes.com/news/education/income-data-for-thousands-of-students-receiving-grants-is-incomplete-1.4373804>

⁶³ <https://hea.ie/funding-governance-performance/funding/student-finance/course-fees/>

	<p>proposes to put in place what is termed ‘a co-regulation model of governance’.</p> <p>- Other agencies under DFHERIS relevant to higher education include: 1) Qualifications and Quality Ireland (QQI) is responsible for quality assurance of both further and higher education. 2) Science Foundation Ireland (SFI) is the largest research funding agency and is responsible for promoting oriented basic research/applied research and increasing Ireland’s competitiveness. It previously came within the remit of the Department for Business, Enterprise and Innovation. 3) SOLAS is responsible for further/TVET education; it was established in 2013. By bringing the HEA and SOLAS together within the same government department the aim is to create a more coherent and horizontally diverse tertiary education system.</p>
International students (% of total) (2020/21)	10.9%
Main international student origin countries (2020/21)	The majority of international students come from <i>outside</i> the EU. In 2020/21, they came from China, India, and the United States. Great Britain was the next largest country of origin for international students, followed by France and Germany (see Appendix 8.8.1).
Number of Institutions in ARWU 2021 Top 500	4

8.3.3 The Pandemic in Ireland – overview and timeline

The severity of the COVID-19 pandemic was highlighted in a public address on 12 March 2020 by Taoiseach Leo Varadkar, who announced the first of a series of restrictions on public gatherings, along with the closure of schools, childcare facilities and third level colleges. These measures intensified as the pandemic worsened and a full national lockdown was imposed from 27 March 2020, with a stay-at-home order requiring people to exercise within 2km of their home and even more stringent cocooning requirements for people in vulnerable categories. The first lockdown was gradually relaxed in June, with significant restrictions remaining in place on businesses. During this first, emergency phase of the pandemic, third level colleges were obliged to move their classes online at minimal notice and this was accomplished with varying degrees of success, through an eclectic mixture of asynchronous recorded lectures and ‘live’ classes via Teams, Zoom or established VLEs such as Blackboard.

Hopes of a speedy return to in person teaching and learning were quickly dashed in September 2021 and the vast majority of third level classes remained online throughout the 2020-21 academic year, with the exception of laboratory and practical classes which were regarded as essential. This cautious approach was adopted in the context of regional lockdowns in three counties in August-September 2021 and a second, six-week national lockdown starting in early October 2020. Following a gradual but tentative improvement in COVID-19 indicators, the Government again began to lift restrictions from November and emphasised the prospect of a more ‘normal’ Christmas season. Yet this proved a false dawn, due to a dramatic but predictable spike in COVID-19 cases and the level of patients requiring treatment in ICU in mid to late December. The Government again reversed course and imposed a third national lockdown from 26 December 2020, with pubs and restaurants required to close their doors from 3pm on Christmas Eve and a further closure of schools until March 2021 (*Irish Examiner*, 21 January 2022).

Several university presidents began planning a return to in person teaching and learning for January 2021 and this caused tension with academic and professional staff, whose representatives highlighted the dangers of a premature return to in person teaching in no uncertain terms. The severity of the national lockdown effectively resolved this debate and the vast majority of classes in Irish higher education institutions remained online up to June 2021.

The high rate of vaccination in Ireland and a decline across most indicators of COVID-19 allowed a gradual but qualified relaxation of restrictions from the summer of 2021. The Government in 2021 moved more cautiously than the previous year, signalling a summer of ‘hope and caution’ rather than an unqualified re-opening of society (Loughlin, 2022). It was in this context that a majority of Irish universities heralded a large-scale return to in person teaching, combined with a mask mandate for students, from the first semester of 2021-22. Despite much public optimism from the Department of Further and Higher Education, Research, Innovation and Science (DFHERIS) and the Irish Universities Association, the level of in person teaching and learning remained uneven across higher education institutions, with one university estimating that it was offering about 60% in person in the first semester while another remained largely online until January 2022. The rate of return was influenced by more permissive government guidance but also by a variable level of infection among staff and students.

Despite some recurrence in COVID-19 indicators in 2022, the strikingly high level of vaccination in Ireland (92.8% of those eligible over the age of 12) encouraged the Taoiseach, Micheal Martin, to announce a relatively abrupt end to almost all restrictions on 21 January 2022. This facilitated a further expansion of in person teaching by higher education institutions, along with the dropping of mask requirements, although it also increased the risk of absence by students and staff due to illness. Most higher education institutions are now offering largely in person classes but this is not a uniform picture, with different solutions and approaches implemented at local as well as institutional levels. Overall, Irish higher education institutions remained in a transition period during 2021-22 in relation to teaching and learning as they moved gradually out of a traumatic public health emergency.

8.3 Sustainability of higher education systems

8.3.1 Policy and funding priorities

One of the central recent policy changes in Ireland was the establishment in 2021 of a new department with a remit for higher education, headed by a cabinet minister (Department of Further and Higher Education, Research, Innovation and Science, n.d.). The inclusion of further education in this department's title also signalled a commitment to the continued integration of both higher and further education in a more broadly understood tertiary education. Interviewees did not regard this as a threat, but as a complement to a 'skills agenda' which higher education can address in part. Increasing interest in apprenticeships was identified by one system-level interviewee as indicative of the demand on the part of students for a broadened approach to tertiary education.

This also relates to a sense that there was a continuity of concerns, as another element of higher education policy in recent years has been the advent of the technological university (TU) sector – effectively universities of applied sciences – which are a new kind of institution in Ireland's historically binary higher education sector. These new TUs are being formed from mergers of smaller institutes of technology, and interviewees discussed that this process has dominated their discussions of policy (institutional and national) in recent years, and indeed with key points in the process overlapping with COVID-19's initial effects on the higher education sector.

Funding as ever is a point of concentration in higher education, in terms of making changes to the existing funding model and allocation models for working hours across different types of higher education institutions. Since the ‘Hunt Report’ (HEA 2011), there has also been questions about the sustainability of the funding of the funding model for the higher education system as a whole. A student union interviewee noted that now parents were becoming increasingly engaged with this topic too.

Related to this point on funding, a system-level actor noted that the funding of the higher education has become a more important question for government during COVID-19, and may have led to some realisations:

So the issue about value for money and what the universities do with all this public money, that hasn't, that critical slightly populist approach hasn't [changed]. Maybe ten year ago there was echoes of it around but not in recent years. The government has, I think, realised two things, a) the universities play a really useful role in the overall ecosystem of Irish society and the Irish economic model. And it's crucial for positioning ourselves particularly in a less competitive tax environment it's all about talent and innovation and creativity and the universities should be ticking those boxes. And b) then also the government has also accepted that comparatively speaking the universities are not lavishly funded – particularly by the public purse – and therefore has stopped talking about people being over paid or the universities being over funded and not using the money sensibly. (INT02)

8.3.2 Internationalisation

Initially there were concerns about how COVID-19 would affect the running of Irish higher education institutions (Donnally, 2021). Interviewees suggested that this was a hot topic as the pandemic took hold:

This was a common theme at very many meetings, “the projected loss for next year is...” Of course, what has happened is that we have now more international students this year than we've ever had before... (INT03).

This was linked to fears about reduced student numbers, but as Table 3 below illustrates, for EU students the numbers have increased in 2020/21 from 2018/19 (the last full academic year pre-COVID-19), and the non-EU student numbers difference can be attributed in large part to the drop incoming students from the United States (see Figure 1 below). That this is no longer a concern was flagged as worth considering in itself, however, *it's almost an irony that the issue has gone away almost overnight. And we have simply gone back to the status quo without really thinking and learning from that initial impact* (INT03).

The increase in incoming EU international students is attributed to ‘pent up demand’, whereas incoming students from countries like China and India are part of long-term relationships and trends:

Because for fee-paying non-European students those effects turned out to be much less severe than originally anticipated. Because a lot of those mobile non-EU students came anyway - they wanted to travel, and they were able to find ways to travel and we put in place a whole range of additional services to make it safer and easier for them. (INT02)

There is a difference, however, in terms of the different kinds of higher education institutions in the Irish system, and the impact that a change in student numbers amounts to, specifically given that for some of the IoTs and TUs, international students make up a rather modest proportion of the total student body:

from an overall institution [perspective] I don't think that was ever a concern in terms of any sort of viability of the institution, it wasn't a funding line that impacted significantly on us (INT11).

These higher education institutions historically have had a responsibility to serve their regions, and consequently have less of a focus on bringing in international students.

Student Origins, 2018 - 2021

	2018/19	2019/20	2020/21
Ireland	200,228	206,971	220,280
Northern Ireland	1,402	1,588	1,624

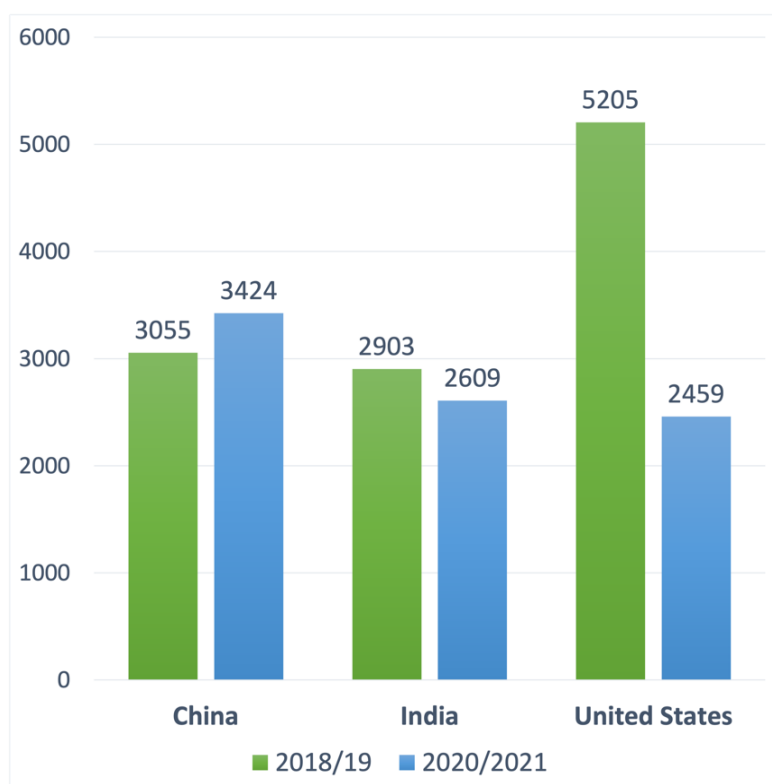
Great Britain	1,486	1,217	1,525
EU	4,233	3,941	4,350
Non-EU	20,439	21,620	17,643

Source: Compiled from HEA data.

Nevertheless, one of the institutions decided to temporarily put a freeze on incoming international students or staff (Erasmus etc.) for an entire semester. For the following half of that year, they decided to ‘reengage with some markets’, though this presented its own difficulties in terms of supporting students and how to coordinate this. This was noted to be a temporary pause however:

I suppose we’re not going to stop our internationalisation agenda. It’s been restricted because of the different travel restrictions etc. but we haven’t sat down and said look we’re going to stop internationalisation and we’re going to stop recruiting in X, Y and Z and look at the home sector. So we’ve continued I suppose with our international partners to keep up those connections [...] So it’s kind of back on track. Once there’s no travel restrictions we’re open for business. (INT09)

Change in Student Numbers for Top 3 Countries, pre- and post-COVID-19



Source: Compiled from HEA data.

Building on the previous point about the advent of the TU sector, this also meant that some higher education institutions were, at the time COVID-19 hit, in the process of developing their internationalisation strategy, and what internationalisation was to mean for this newly merged institution.

It's not just about the money, it's about the benefit that these students add to the campus in terms of diversity and internationalising the experience for our own students here. For some reason I think there's still a lot of work to be done on the 'internationalisation out'. With certain exceptions our students tend to be quite reluctant to move out. And I don't quite know why that is. (INT10)

This interviewee noted the other aspect of internationalisation, which is outbound student mobility. Historically Irish students have been unwilling to study abroad (Gibson & Hazelkorn 2019). Various possible explanations include the barrier of learning a third language (as well as English and Irish), as well as the willingness of Irish people to move abroad *after* their studies, or if going abroad during their studies to do so during their summer holidays. COVID-19 was noted as having had some effect on this, however, with there now being an increase in uptake of routes for Irish students to study abroad, to the extent that demand has surpassed the available budget to support outgoing Erasmus by a factor of 100%. The question of why this is so has not yet been explored, but an initial area for explanation might be that it is a consequence of 'cabin fever', and an eagerness on the part of students to 'get off the island'.

At the national, system level, COVID-19 represented a chance to rethink what internationalisation meant for Irish higher education, and the fact that new kinds of international engagement are coming to the fore, with less of a focus on individual student recruitment, and instead greater attention given to building relationships with institutions, shared courses, joint degrees, etc. As one national level actor explained it, institutions were stepping back from the narrow pre-COVID-19 rush to recruit students, and for that to be the whole of their internationalisation strategy. Instead, more were starting to think about things with a broader strategic perspective. Having a VP for global affairs was an element of this, as they weren't simply concerned with internationalisation as student recruitment.

Almost all the universities now have appointed a VP global when they really didn't have one before. And the VP global is obviously in charge of the international office but has a much broader remit around you know all sorts of international partnerships, research development and joint projects, the European university initiative. All sorts of things which the international office strictly speaking was only vaguely interested in because they didn't bring in hard bucks. (INT02)

Engagement by staff with international networks (such as the EUA or EURASHE) was noted as a crucial part of this, and increasingly important in how higher education institutions engage with internationalisation.

Another interviewee from the research university noted similar developments, explaining them in the form of phases of internationalisation, with a new phase which doesn't just concentrate on bringing international students in and educating them in the Irish or European curriculum: *partnerships and internationalisation of curriculum and proper exchange of programs and joint dual programs* (INT03). In the other institution, a greater focus on exchange and sharing as well as wider effects on the community was evident.

8.3.3 Differences within the sector

In part there were differences within the sector due to the fact that in large part higher education institutions were 'left to their own devices' by government to sort out their responses. While other areas of education were strongly and centrally directed, the governance structure of the higher education system led to coordination by, between, and across higher education institutions, in cooperation with system level actors like the HEA and others.

Certain differences in terms of the size of higher education institutions were noted, and less so in terms of the type of higher education institution, given that larger institutions had some critical mass in terms of teaching and learning and IT support to facilitate a crash transition to online education. There were noteworthy differences that related to the governance structure of higher education as a whole, however, notably in terms of the funding structure which has different staffing models depending on whether the higher education institution is a university, or an IoT or TU. Funding models meant that for the latter kind of higher education institutions, their staffing models are more 'lean' with consequent less capacity for emergency changes.

This also had some implications in terms of long-term funding, infrastructure, flexibility in terms of research, teaching, etc.

8.3.4 Inequalities in the sector

A recent policy event here was the appointment of former EU Commissioner Maire Geoghegan-Quinn to chair an Expert Group on gender equality in Irish higher education, which published its findings in 2016 (HEA 2016). This led to the *Gender Action Plan 2018-2020* (HEA 2018) with implications for institutions in terms of what they could do with all this policy production. Some considered having a VP for gender equality, broadened out then to consider a VP position for equality, diversity, and inclusion. This high-level focus meant that others who had been working in this space were overlooked: *we're forgetting about our colleagues in access, who were there right at the start* (INT11). In interviews, gender was discussed largely in terms of the Athena Swan charter and awards, which directly policies above as involvement in this process it was made a recommendation of the Gender Action Plan (Advance HE. n.d.). In this, the 'institutionalisation' and 'policyisation' of EDI is clear:

I think there's been huge movement, in my institution huge movement towards looking at the whole EDI area, including gender balance. I mean we worked quite hard to get what is at this point and Athena Swan bronze institutional award. But in a way which was meaningful and not just looking for the award. (INT11)

As well as this framing in policy terms, however, the gendered aspect of COVID-19 was noted by a number of (male) interviewees:

There is a sense that a lot of working mothers ended up with the dirty end of the stick, particularly in the earlier lockdowns when the schools and all were closed. And you were trying to do lessons at home and trying to do your work at home then. (INT07)

It's quite obvious that during COVID-19 when everyone was working from home that females picked up a disproportionate share of the domestic stuff. And therefore had their academic work disproportionately affected by the lockdowns, whereas males much less so on aggregate. (INT02)

The intersectional effects of COVID-19 were also noted by a national level actor, whereby the negative effects of precarity, gender, and age compound for researchers:

Even at postgrad research level the data is coming through where the data this year is different to the data two years ago which shows that female postgrad research students were more adversely affected by COVID-19 than male postgrad research students. So even at that early stage the effects of COVID-19 are bigger and more negative on young women. The younger women, even at that early stage, because they have additional caring responsibilities or family responsibilities. (INT02)

The general issues relating to precarity were identified by a number of interviewees, but here we would like to point to the research project by Camilla Fitzsimons, Sean Henry, and Jerry O'Neill (2021) which addresses this topic in considerable depth, excellently captures the experience of precarious workers in Irish higher education institutions, across a range of dimensions, through questionnaires and interviews.

8.4 The purposes of higher education institutions in society

8.4.1 Science

In terms of the place of science in Irish society, it was noted that while science was generally regarded as important, COVID-19 brought this centre-stage with certain Irish academics (e.g. Prof Luke O'Neill of Trinity College Dublin) becoming household names via the media. This was true not just because of their scientific expertise, however, but other aspects of their personality becoming known to the public:

I think that changed people's view, it woke them up. For some people who would have been agnostic, it woke them up to the fact that actually some of these scientists were normal people who weren't only interested in being in the lab. They actually wanted to make a difference in society. (INT11)

Not everyone could do such public engagement via the media, however, as it involves its own set of skills, and not everybody is naturally good at such science communication. A point related to this was whether this would last, and that this question would be of central importance with other scientific issues of public importance, such as climate change. The lasting nature of any change in the question of what science for would come up against simpler ‘us-and-them’ framings of responsibility for climate change:

There’s a very simple narrative amongst younger people which I think is interesting and says a lot. But it’s basically ‘you guys, you oldies, you have ruined the planet for us.’ (INT11)

Such a framing detracted from the complexity of the issues involved in climate change, and has potentially negative effects on how science is viewed in society, in that ‘*the society, the infrastructure, the medicine, all the other things that science has brought us, all the good, is in danger of being conflated, the science with human behaviour.*’ (INT11)

Another element of the discussion related to the distance between the public and traditional for a where academic work or research is discussed. An interviewee from one of the national academic representative organisations agreed that academics were having some influence as a result of the scientific nature of COVID-19, but speaking of the sector as a whole suggested *but I don’t think we are expressing it very explicitly. I think it’s implicit* (INT02). While there may be a greater appreciation in society in general of some research that goes on that doesn’t have immediate economic consequences, the fact that much of the research which was of relevance during the pandemic was not funded through the main Irish research agencies – rather it came from core funding or European (e.g. ERC) funding. The implication here is that this is, to a degree, fundamental research going on *in the background and people [...] aren’t normally that aware of it because it’s hidden in academic literature* (INT02). When needed, this research emerged during the pandemic, but until that point it was not obvious outside the academy, it was suggested, and this might be something higher education institutions and/or academics should be aware of. The language here, and as used by another system-level actor, framed the discussion in terms of ‘the university within a community’ (eschewing hoary tropes of ‘ivory towers’), but could recognise that there is still more to be done about making e.g. more research more *available* (INT01).

In terms of COVID-19, one interesting example was given by an interviewee of public engagement in terms of a research project that focused on the role of masks containing infections in the absence of vaccinations (circa April 2020). By August 2020 it became recognised that masks would indeed have a role in minimising the circulation of the virus. This was significant, and won awards, and would have influenced the policy for their institution if students were to return to campus in September 2020 (which they did not in any event). But one issue that was highlighted here was that this project did not have as much traction in public or media discussions as it might have, and the view communicated by this interviewee is that the prestige of individual researchers' academic institutions might have contributed to this.

If I'm being honest, I think if that had been pushed more by some other institutions it would have been listened to more. So, I think there's a weakness there [...] as a scientist I would always look at the evidence and try to look at the strength of the argument. But what I think this revealed is there's a lot of politics, there's a lot of perception. And that's not healthy in the long run because then that misunderstands the capacity of others within the sector to perform. (INT11)

This also carried over, they noted, to funding. A bank allocated €2.3 million to funding projects on mask research, but this researcher's group received €50,000 from one of the Irish funding agencies to conduct their work. So popular or folk prestige hierarchies in terms of universities versus IoTs or TUs can have a number of implications. Another point noted by one interviewee from the research university was the possible skewing effects of an exclusive focus on science as a consequence of the pandemic (and also with respect to global warming) *for many policy makers the solutions are technological, they are scientific and therefore, you know certain areas in universities are going to be promoted. They are going to attract additional funding* (INT03). The danger here was this might lead to the side-lining of the arts and humanities, and cuts to funding in these areas, which has happened in other European countries recently. So even 'good news' stories for science, research, and higher education can have differentiated consequences.

8.4.2 Education

As is clear from the data in Table 3 above, student numbers are continuing to increase, which is a consequence of general demographic trends in Ireland. As a consequence of COVID-19

and the transition to online education, there has been a perceived increased desire for certain kinds of courses with more options for distance education. One member of senior management of a higher education institution noted that students were enrolling in Munster (the south of the country) from locations within Ireland that were a considerable distance away. This was noteworthy as there were other institutions which were considerably closer to those students. This was not because what the higher education institution chose was exclusively online, however, but rather that there were better hybrid options for students to meet others in person in practical sessions.⁶⁴

For existing courses, more students were also expecting lectures etc. to be recorded, even if they were delivered in person on campus. This could be because students had attended the lectures and wanted to rewind to check their understanding. But another view expressed by a member of the middle management in one of the higher education institutions, that students are not necessarily full-time students even though they are enrolled as such. The view which was expressed that this might be to fund a certain ‘life-style’, though *some of the students probably need those part-time hours that’s to be sure* (INT10). But it must be observed that postgraduate students are not funded by the state, and so working may be a financial necessity even for those enrolled full time. An administrator in another higher education institution also made similar observations, suggesting that recording lectures allowed students in what are ostensibly full-time Master’s programmes to work part-time.

There were many observations that the convenience of more teaching online is not an unalloyed good, however. There can be many disadvantages for students who do not have quiet workplaces in their homes where they can engage with material (a problem which, it was noted, extends to staff too). Related to this was the view that there are aspects of online education that can work well, but that a face-to-face aspect is necessary at some point, whether pedagogically, as part of social formation, solving issues for students, or for the holistic experience:

So I think you know education has to realise that society will still be people meeting in pubs, meeting in dances, meeting in supermarkets, meeting over dinner. And I don’t see why we should imagine that we would want to educate in a way that would be

⁶⁴ This may be somewhat surprising for other countries, but Irish students are relatively mobile in terms of where they choose to study – this is especially so when hybrid options are available.

completely disconnected from the way society operates. So fully online would seem to challenge that. (INT11)

There was a view that staff and students both, however, do desire in person interaction (see section 3.1 for more on this).

8.4.3 Labour market

Discussions of higher education in policy terms, across universities and IoTs/TUs, has long had a strong focus on the labour market. Indeed, the IoT sector was conceived initially to have a specific focus on regional labour needs. In this regard, COVID-19 has not created a new labour-market discussion, but added another dimension to conversations about employability. One recent iteration of this related to ‘microcredentials’ (e.g. developing a national framework for this aligned with the Europe Framework) as continuing professional development, and the online component of such offerings was being considered prior to the pandemic. As such, this trend was accelerated by recent events. One specific area where there were direct links drawn between COVID-19 and higher education responding to labour market needs has been framed in terms of upskilling/reskilling. Some funding had come through from government for some programmes to ‘upskills’ people who had lost employment during COVID-19, but this was by no means a large proportion of funding, nor a comprehensive programme. This is not necessarily ‘new’ per se, however, and has been a part of discussions of higher education since the economic crash of 2008 (with ‘labour reactivation’ programmes such as Springboard⁶⁵ funding courses in specific fields). Another interesting point is that the general shift of many aspects of the economy and employment to working online and from home meant that there were in fact now *more* employment opportunities in some regions than had previously been the case:

it’s phenomenal at the moment, even for placement people are just taking graduates. They’re getting earlier and earlier in relation to the talent pipeline; any conversation I’m having is well how many graduates have you got, what’s the talent pipeline in the next couple of years? (INT09)

⁶⁵ <https://springboardcourses.ie/>

Foreign direct investment (FDI) is another economy-related lens through which Irish education is often framed, and points were made by a number of speakers in terms of Irish higher education a workforce which is attractive to FDI. Another element of this, however, is the regional mission of certain higher education institutions (notably TUs and IoTs), and their perceived responsibility to address existing employment needs. One figure from senior leadership suggested (in line with more recent discussions in European and international policy) that FDI and existing employment needs can't be the only viewpoint however:

I think clearly at this point we are still not doing enough in terms of entrepreneurship and innovation with our students. When you want to create a job, why not create a job for yourself? Start [educating] on that basis, that it should always be there. Particularly in the regions, because of the challenge of bringing in foreign direct investment but if you can't get the job to come to you, why don't you go to the job or create the job for yourself. (INT07)

Here the focus of the new department of further and higher education on having a perspective on 'tertiary' education is relevant.

8.4.4 Relations with society

A central initial point to be made about higher education in Ireland and its relations with society is that this topic is often addressed through the language of 'regions'. As noted above (see section 1.3), the IoTs as part of the binary system of higher education in Ireland were established with a clear responsibility for regional development. This has not changed, and was reiterated by multiple interviewees. As well as this, the regional structure of the Irish political system has a very definite regional focus (but *not* Irish government, which remains strongly centralised). As such, higher education institutions have a political aspect in a local and regional respect, which is *a key differentiator for these institutions. And it's exactly what Ireland needs, you know if we're going to deliver on big national policy ambitions* (INT01). Indeed, the development of the TUs stemmed in part from political pressure to address the fact that certain regions did not have universities (only IoTs) and that this was something that needed to be addressed.

Another aspect of higher education's relations with society can be seen in research funding priorities. Once again, however, there is a sense that COVID-19 is understood as being one issue in a wider context of challenges, with one interviewee setting out how this was described by a senior Irish politician: *I heard Richard Bruton give a talk at an event before the pandemic really kicked in and he said that the pandemic is going to challenge us for a period of time, but climate change is going to challenge us permanently* (INT11). So here research priorities as a form of higher education's relations with society is seen with a longer term view. But there was no view of immediate changes or political pressure for this. A senior member of leadership speaking of this absence of political pressure suggested

I think we are still in panic mode in the sense that the fire isn't gone out yet [...] The type of questions that you have asked have not been asked of us. I think before we wait for politicians to ask them, we should be asking them ourselves. (INT07)

This was echoed by an interviewee at the national-level, who returned to the point about whether how higher education relates to society is implicitly or explicitly conceptualised.

8.5 The workings of higher education institutions

8.5.1 Distance and online education

As noted above, prior to COVID-19 there were already discussions about digital teaching and how this would work. When the pandemic necessitated a general transition to online education, this was regarded in generally sanguine terms as having been an adequate but not ideal response:

I mean you could say it went surprisingly well at a very macro level, in that most students continued to learn, most people continued to teach, students completed their year. Those who were going to graduate graduated. The other people progressed to the next year. Was it optimal? Absolutely not. (INT02)

It was noted by another interviewee, however, that this was a particular kind of online work that was taking place, namely *emergency remote teaching* (INT08, INT10). Teaching moved

online out of necessity, and this transition was not optimal. This was not choice made by either students or academics. The language used generally by interviewees discussed being able to ‘function’ online.

There were some positive aspects such as making it easier to internationalise programmes or curricula by facilitating easier access to and communication with international partners. Another benefit was the need for self-reflection and staff being *forced* (INT07) to engage with online education, as one senior leader described it. An administrator noted that there was a *reluctance in the past to even think about it or move over to any online teaching* (INT04).

Issues related to connectivity, broadband access in certain regions of the country, laptops, and so on: *you have the stories of the students coming into the car park to try and pick up the Wi-Fi [...] staff showed huge ingenuity about how they responded to that* (INT01). Other positive developments were noted in terms of a broader view of assessment (such as open book exams, which can be taken remotely), as well as the benefits of recording lectures (even though these can often be *more* work for academics). Some potential for increasing accessibility was also identified, such that e.g. for carers looking after someone longer term, online education provided them with more options: *flexibility, social justice, demographics, reaching out to underrepresented groups, it is easier now than it was a year and a half ago* (INT11).

Worries were also expressed about the larger-scale implications of the emergency transition to online education, in terms of a loss to the *richness* (INT11) of the education system. As one member of middle management expressed it, there was a concern that there would be a movement towards recording lectures *so we don't need as many staff going forward, we can rationalise, our institutions can shrink because one person can reach 100,000 in their class and we'll then just do questionnaires, multiple choice questions* (INT11). A member of senior leadership echoed these concerns, and expressed a need to be careful, because this would inevitably have funding implications: *I think in a very short space of time we had ministers and other people suggesting that online is the future. And that we wouldn't be investing any more money in lecture halls and classrooms or any of that thing because “that's all old hat, just do it online”* (INT07).

In educational terms, it was observed by one administrative member of staff that it's necessary to differentiate between who is doing the online learning, i.e. what stage they are at, as undergraduate students approach things differently to masters students, so there needs to be an

awareness of differentiated needs. It was also noted by one national level interviewee that student surveys for 2021 showing what they described as a

massive drop off in the quality of student interaction with their academic staff. Whereas in a previous year about two-thirds of students were saying their interaction with academic staff was good or very good, this year it's dropped down to about one out of three. That's an obvious effect (INT02).

This relates to the observation above about the ‘emergency’ aspect of the online learning taking place, and that that exhaustion may be setting in.

8.5.2 Work of academics and support staff

An important aspect of the changes to the work of academics and support staff was framed in terms of interacting with unions if there is going to be increased delivery of programmes online. This follows the Irish model of ‘social partnership’ in decision-making, in the ideal form involving all stakeholders in discussions. The need for such discussion relates to changes to employment contracts and how programmes would be delivered online, and the hours required to develop such courses. A national level concern here is in terms of e.g. carbon emissions and working from home versus being on site. Another aspect of consultation of unions relates to professional, managerial, and support (PMS) staff, many of whom are in favour of being able to work remotely, and unions representing PMS staff being keen on such options being available to their members. One member of senior management for one of the case studies, however, suggested that *our unions are going to be a problem – they would see online delivery [...] as a threat to jobs. And maybe they're right (INT07)*. Their view was that as such this issue needed to be dealt with delicately. Another member of middle management from the same higher education institution observed that some e.g. PMS staff won't be able to work from home, or a certain percentage would need to be on site, and so that would also need to be dealt with fairly.

This brings in the next point, which would be the need to differentiate between the experiences of academic staff and PMS staff, as well as differentiating between permanent and precarious academic staff. The experiences described varied considerably, and one administrator who is

also a union representative set this out clearly, saying *I think there's a huge division* in that academic staff were to some extent looked after, whereas PMS staff were somewhat neglected:

I think there was a lot of angst and a lot of grief and a lot of fighting to get proper equipment out to people to do the job that they were asking them to do. We moved from the office desk to the kitchen table in a heartbeat. (INT05)

As well as this, there was the expectation – indeed the requirement – for some PMS staff to be on site, but without due consideration being given to how this would be managed, nor the risks this might entail.

We still had cohorts of people who were coming in to work in particular during the pandemic, some of them traveling in by public transport to stand around all day doing nothing because there was no manager here to direct them. There was a real disconnect there in things like that. (INT05)

Certain elements were identified as being worth holding on to from this experience, e.g. having some meetings online, bringing in international people to work on course boards or as external examiners, working from home on certain days (*I'm getting more done when I'm at home there are fewer disturbances (INT04)*), and thus having reduced numbers of people in the office. But as with online education, staff members missed the social aspect of daily life on campus. Part of this relates to being able to meet people fortuitously in a corridor, or going into someone's office for a quick chat or a conversation (emails are regarded as more formal). With the return to campus for a time in 2021, recognised many of the intangible benefits of not being online:

What I've noticed since September is the general delight amongst staff to be back and meeting with their peers, having a cup of coffee [...] we can't overestimate the social aspect of going to the college or going to work. People need that, in terms of their own wellbeing. (INT07)

8.5.3 Duty of care

The framing of the question here related to what universities did for individuals, and one significant way this was approached by interviewees was to set out that institutions 'did what

they could”. International students were a clear concern. For those on campus, there were instances in which higher education institutions dealt with incoming international students needing to isolate, and the role here was for an institution (via their international office, chaplaincy, etc.) to ensure these students were aware of the various regulatory requirements, ensuring that they had food, etc. *We set out a number of days where we actually had food deliveries to students so they could Whatsapp in what they needed and we would bring it to them* (INT09). This was also framed in wider cultural terms: *I would say it was very much Irish. It was lovely to see, almost like “the land of a thousand welcomes”* (INT11). The importance of positive collegiate relationships was mentioned, as well as a collegiate approach between higher education institutions across a region so that different institutions pooled aspects of their approach to this situation. This ‘collegiality’ also seemed to extend beyond employees working careers, in that retired staff volunteered in this period to e.g. deliver food to students who were isolating.

Disaggregating what ‘the university’ is here is worthwhile however, as student societies and student unions were identified as being important for responding to the crisis:

I have to say some of the student societies, the international society, for example, were super. They would do things like call with food to the door. They did online games nights. They did culture nights so that people could talk about where they were from... (INT11).

One student union representative from another higher education institution noted that officers with the union would leave their phone numbers with security so that when international students arrived on campus and would have to quarantine, these students had food delivered to them by their peers. This was clearly in response to instances when students arrived and did *not* have this:

That was something that was really unfortunate and I think those that experienced that definitely had a very damaged relationship. And I think the isolation of it all also was terrible (INT06).

This raises the question – perhaps a cynical reading – as to whether this is an example of students in effect helping themselves. A number of interviewees did note the role of students here, and a generous reading would be that this was recognising the very significant

contribution students made in this setting, and to the life of the university a social world more generally. Another aspect relating to students is that while there was some money available to part-time domestic students (who would be in full time employment), this was not an option for international students (Citizens Information, 2022). As such, one interviewee said

I would reckon that 60, 70% of [emergency] expenditure went to support international students. That is to get them home on very expensive flights if we could, and if they were permitted and when they were permitted to travel. Or in keeping them in accommodation that they could not afford because they had to extend their stay in Ireland and were not permitted to travel home but didn't have the means of remaining here. (INT03)

In terms of helping students, staff suggested that they were doing what *they could individually* (INT04) – again, the social framing is noteworthy – but that they didn't know half of what was going on, and were reliant on struggling students coming to them. Partly it appears that COVID-19 led to a breakdown in social, non-institutional forms of organisation (e.g. students knowing each other and meeting in person) which exacerbated student isolation. Trying to replicate this online (e.g. via group chats) presented its own issues, with an administrator mentioning a *toxic atmosphere online* (INT04) and in social media. The seriousness of the issues being faced by all involved was set out by an interviewee who noted that their department lost a student to suicide during the pandemic: *we saw our students were really struggling* (INT04). Resources here were something of an issue however, so that while the institution

Did make an effort to contact the head of school through the school themselves, there were reports from student counselling from the [government health agency] about the number of student suicides. Mental health was a huge, was just inundated with requests but we just didn't have enough staff and they were very under pressure, very much under pressure.

A staff member with responsibility for aspects of personal welfare stated '*I have to say to you that there were severe forms of isolation reported, with lasting effects*' (INT03).

In terms of staff, some interviewees noted that while their institution 'tried', employees struggled nevertheless. One way this was framed was in terms of the community that these

staff members were a part of, and that the department or school level culture could have an effect: *it was down to us to make sure we met on a regular basis for a cup of tea or coffee virtually or whatever. We didn't do that. I know other areas of the college did do that, and then they felt more connected. I'd say that's probably a fault of our school itself* (INT04). Here the framing is significant again however, in that the responsibility is implicitly that of individual employees or staff members, rather than management faculty or institutional leadership. An academic and member of the top leadership of their higher education institution when asked about how his institution performed responded: *Oh, I think poorly! You know, sure, we were all in a difficult situation, it was an emergency and so on [...] very little, very little was done* (INT03). They also further pointed out that while some things were done for academic staff, little was done to assist PMS staff. More generally, while there has been a return to campus in many cases one interviewee said *I can still see high levels of frustration, high levels of irritability, you know people who haven't returned to full functioning yet. We're still nervous about coming into an office and so on* (INT03).

8.5.4 Governance and decision making

There were a variety of ways that governance and changes in this realm were discussed. One was how higher education institutions reacted to the COVID-19 crisis in the initial period, and the nature of their 'emergency response'. In the initial phase university leadership and management didn't know for how long higher education institutions could have to close, and so that initial period was quite reactive, and short-term. Beyond this it was understood in the higher education institution that standard governance approaches (academic council with 105 members) would not or could not meet on a regular basis. Instead, an 'executive committee' would do so (a practice that had been in place for many years, but which attained new significance), and academic council 'formally devolved' power to make decisions to the smaller executive committee. This was the specific group that would meet regularly to discuss government directives, and while there were concerns that occasionally they were in a grey zone in governance terms (taking over executive functions etc.), they continued to function as the decision-making node in that higher education institution. One administrator was of the view that decision making was mostly at the school or department level, as far as was evident, with only occasional communication from the institutional leadership, though communication from that level was described as *not great* (INT06). Within schools, the school management

group and executive committee would take decisions – but often these decisions relied on institutional-level calls to be made about timetables, social distancing requirements etc.

Related to why the full academic council couldn't meet online was that it seemed or was decided that 105 people could not constructively meet in an online setting. This brings the next point about meeting online, the effects on higher education institution governance. The downside to such large meetings in person were that it would be in a large room, with *maybe dominant people taking the mic all the time or making their points* (INT09), whereas the chatbox allowed more people to make contributions, and even voting was more easily facilitated (being more efficient, and quicker). One interesting point here was that there were some specific issues in terms of discussions in 'chat boxes' online, and how these interactions were to be recorded. Did people typing in the chat function constitute statements that should be minuted, or were they closer to whispered remarks between colleagues? A negative aspect of these meetings was highlighted by a union representative, in that in face-to-face meetings it was easier to have robust discussions and put a case forward, whereas online meetings can foreclose such discussion, with the rise of *a definitive time for a meeting [...] 'we've an hour for this meeting and that's it'* (INT05).

An interesting observation from a student union representative suggested that COVID-19 in fact resulted in improved relations with institution leadership, and students having an increased say in decision-making. This may relate to the view that students were uniquely affected by the pandemic's effects, and also perhaps negative experiences which some students had. Initially mitigation measures were not in place, and this led to strong pushback from students, which perhaps reminded higher education institution leadership for the need to fully include students in decision-making (students for that higher education institution have a position on various institution-level boards):

I think in the end it went really, really well and we were really fortunate to be in it together. I think we can honestly say that, do you know, no matter the ups and downs. Even if we were coming from two sides of the conversation, we would always come to a consensus that I think nearly everyone was happy with [...] Everyone that's sitting on boards acted in the best interest of the college. And that's the terms that you sit on the board with. (INT06)

For this institution at least, it appeared that students had the strongest position in the governance structure, certainly when compared with PMS and academic staff. A national-level interviewee also observed that involving students was important, *so what you were now getting was inclusive conversations. You weren't getting policy divorced from implementation* (INT01). Similarly, an institutional leadership interviewee discussed union involvement, and the need for and benefit of a less suspicious form of engagement by the institution's leaders:

Instead of going on a defensive mode, let's talk to the staff, let's find out what they like what didn't they like, and try and shape the future on a wider conversation. I think there's a laziness in a lot of management as well [with a view that unions] take a particular hard-line position and say 'we can't do any of this because the TUI are objecting.' But are you talking to your staff? I think if you go in and say 'well there's a hundred people in my staff I spoke to them, this is what they want, who are you representing here?' (INT07)

One consequence of this, however, is that there was a perception that government had not caught up with the reality of governance in higher education institutions, and the more inclusive, consensual model is not more widely understood:

I don't think that vision has reached the upper echelons of the civil service yet, but I think we are going to have to. Because actually they have been wanting us to have a much more flexible model for many years and now we are in a position to talk about how that would work, and we can see that it wouldn't be a disaster. (INT02)

Relatedly, the student union representative described COVID-19 and the changes it necessitated as an opportunity, and one which it *would be a shame to waste* (INT06).

8.6 Concluding observations

As well as the points discussed in the headings above, an number of points spanning these issues are worth mentioning in their own right. An initial point is to identify the incredible difficult conditions which have been faced by students and staff, and which are not yet over. It is important to note, as some interviewees did, that when discussing the pivot to higher

education online, that what is being discussed is *emergency* remote teaching. Meetings and learning took place online in a crisis setting. Students and staff alike brought different parts of their lives together in a ways that have no precedent, and for which there was no way to adequately prepare. As such, any ‘lessons’ that might be learned from such a crisis cannot be disconnected from this social context. Time and further research may tell us what the fallout from these events is, and the half-life of the societal trauma COVID-19 represents. As a final point on this topic, the authors would like to thank all those interviewed for this report for giving up even more of their time to online participation in these research interviews.

Another aspect of the possibility of opportunities that COVID-19 represents for higher education is the reception of science in Irish society. Even ‘good news’ stories for research and higher education can have differentiated implications. Clearly academics from Irish higher education institutions playing a significant role in communicating findings from research communities, and the implications this has for those living in Ireland. This provided an opportunity for Irish researchers to engage with Irish society through the media, which may have had a side-effect of further grounding the legitimacy of investment in higher education. A point here relates to the disciplinary origins of those representing the scientific perspective. Bio-medical fields can be viewed as having an unambiguous form of societal impact in such a time of crisis. This should not lead to the prioritisation of any area at the expense of another, however. As is set out in the Universities Act 1997, research and education in the arts, humanities, and social sciences are central objectives of the university (Gibson and Hazelkorn, 2017: 203), and successes for any discipline should be considered as a benefit to all. Similarly, attention should be given to cultural, historical, and social implications of events, as well as the more standard scientific and economic aspects.

A third point here relates to an observation that might be made of higher education research in general, which is the need to disaggregate what is meant by ‘higher education’ or ‘the university’. At times it can seem that universities and their governance can be understood exclusively between administration, governing bodies, policymakers on the one side, and academic staff on the other. In our interviews, the picture of Irish higher education during a crisis was considerably less simplistic. So, in considering how ‘staff’ fared during COVID-19, it is necessary to make a distinction in order to understand how the experiences of administrative staff differed considerable from their academic colleagues. Relatedly, the nature of administrative staff’s interactions with students was often (not always) different from that

of academics, and made them privy to other aspects of the experiences students were having. Similarly, when some interviewees described how their institution responded, students were included in this, recognising implicitly that students are indeed constituents of universities, and not just raw material passing through for processing.

A final observation relates to this, which is that this study has enabled us to make clear the consensual and collegiate reality of Irish higher education. The student union interviewee noted the increased role of the student voice in governance at their institution, and academic staff and leadership noted the centrality of student societies and unions in responding to the difficulties faced by students. Leadership noted the role played by unions in discussing the implementation of changes. Administrative staff were invaluable conduits of information and news for and from students. Higher education is a complex and diverse entity, and universities as its central institutions are emblematic of this. There are long-standing and well-proven norms of self-governance, which are often side-lined by flattening efforts to run higher education institutions as just another organisation. As such, in a similar way to how COVID-19 represents an opportunity to appreciate the role of science in society, it can also demonstrate the value and resilience of collegiate and consensual norms of governance in Irish higher education institutions.

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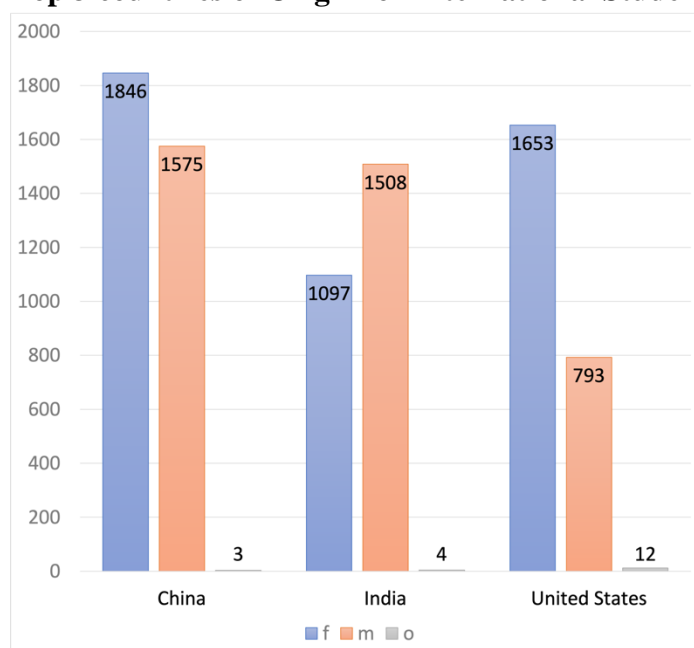
8.8 Appendices

8.8.1 International Student Data⁶⁶

Top 10 Countries of Origin for International Students, 2020/21

Country	Students
1. China	3,424
2. India	2,609
3. United States	2,459
4. Canada	1,633
5. Great Britain	1,525
6. Malaysia	1,002
7. France	908
8. Germany	734
9. Saudi Arabia	655
10. Italy	580

Top 3 countries of Origin for International Students, 2020/21



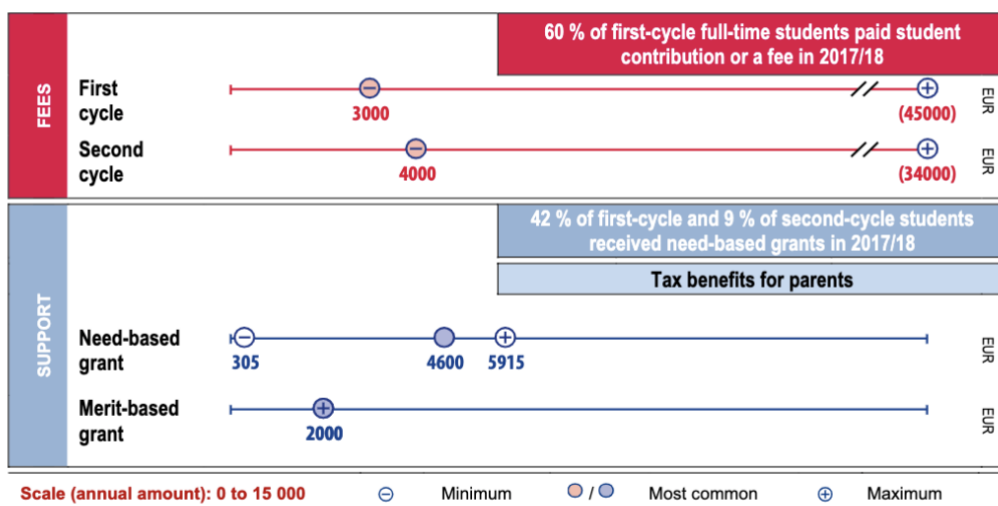
⁶⁶ These tables and figure were compiled from HEA data, available in raw form from their statistics webpage: <https://hea.ie/statistics/data-for-download-and-visualisations/data-for-download/>

8.8.2 Ireland Fees data (Eurydice)⁶⁷

National System Information Sheets

IRELAND

MAIN CHARACTERISTICS



KEY POINTS

Fees (2020/21)

- In principle, all full-time **first-cycle** students are expected to pay a fee set by the higher education institution. However, first time students studying full-time and who are EU/EEA/Swiss/UK citizens or those who hold certain permissions from the Minister for Justice and Equality and have been resident in EU/EEA/Switzerland/UK for at least three of the five years are generally exempt from full tuition fees. They are liable for a 'student contribution' of EUR 3 000 per academic year. Students who qualify for need-based grants provided by the Department of Education and Skills (see below) have the student contribution (or part of) paid on their behalf by the Exchequer. Those who do not meet the 'free fees' criteria pay a total fee as determined by each higher education institution.
- Part-time** fees are generally half of the consolidated fee (student contribution and tuition fee) for full-time programmes. However, unlike in the case of full-time studies, there is no fee support for part-time students, which means that part-timers generally pay more than those studying full time.
- In the **second cycle**, all students pay tuition fees that are set by higher education institutions, and that may reach EUR 34 000 per year.
- Fees for **short-cycle** higher education programmes are set by individual higher education institutions (no information available on the fee range). All students studying in short-cycle programmes pay a fee.
- International student** (non-EU and non-EEA citizens) fees are generally two to three times higher than full EU fees and are set by the higher education institutions.

Support (2020/21)

- Need-based **grants** are provided to full-time students by the Department of Education and Skills, depending on means, nationality, residency, previous academic attainment, family size and distance from institution attended. For first-cycle students, grants range from EUR 305 to 5 915 per academic year. Students who qualify for grant assistance also have the student contribution or tuition fees paid on their behalf. Second-cycle students whose reckonable income (parental, spousal or student's) is less than EUR 23 500 and includes a long-term social welfare payment may have a fee waiver for tuition fees up to EUR 6 270 and are also eligible to receive a special rate of maintenance grant of either EUR 5 915 or EUR 2 375. Second-cycle students whose reckonable income is less than EUR 23 500 and do not have a long-term social welfare payment may have a fee waiver for tuition fees up to EUR 6 270. A second-cycle fee contribution of EUR 2 000 applies to those with a reckonable income up to EUR 31 500. Short-cycle students are not eligible for student grant assistance.
- Bursaries of EUR 2 000 may also be awarded based on merit- and need-based criteria. 0.2 % of first-cycle students received such bursaries in 2017/18.
- Tax benefit** (relief) at the standard rate of tax (20 % up to a maximum of €7 000 per person per course) may be claimed in respect of certain full-time and part-time courses of higher education. It applies to either parents or students, depending on the applicant's status.
- No **loans** and no **family allowances** to higher education students' parents are in place.

⁶⁷ <https://op.europa.eu/en/publication-detail/-/publication/01ea3b55-5160-11eb-b59f-01aa75ed71a1/language-en/format-PDF/source-184435368>

Chapter 9 Portugal

Amélia Veiga⁶⁸, José Pedro Amorim⁶⁹ and António Magalhães⁷⁰

9.1 Overview of research conducted

Interviews	
National system-wide actors (ministry, politicians, unions, professional associations)	Representative of academic staff's Union (National_1) Academic expert influencing national decision-making processes related to the pandemic situation (National_2)
	University (HEI_A) Polytechnic (HEI_B)
Central Administration (CA)	Vice-rector (HEI_A_CA) Vice-president (HEI_B_CA)
Middle leadership (MIDD)	Deans Sciences (HEIA_MIDD_A1) Dean Fine Arts (HEIA_MIDD_A2) Representative of the Pedagogic Council (HEI_B_MIDD_A1)
Administrative staff (NONAC)	Support to Pedagogical Innovation (HEI_A_NONAC_A1) Support to technologies (HEI_A_NONAC_A2) Support to quality assurance processes (HEI_B_NONAC_B1) Support to decision-making processes (HEI_B_NONAC_B2)
Academics (AC)	Health sciences (HEI_A_AC_A1) Engineering (HEI_A_ACA_B2) Physics (HEI_B_AC_B1) Information systems (HEI_B_AC_B2)

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⁷⁰ Centre for Research on Higher Education Policies (CIPES), Faculty of Psychology and Education Sciences, University of Porto

9.2 Country profile

9.2.1 Basic data about Portugal

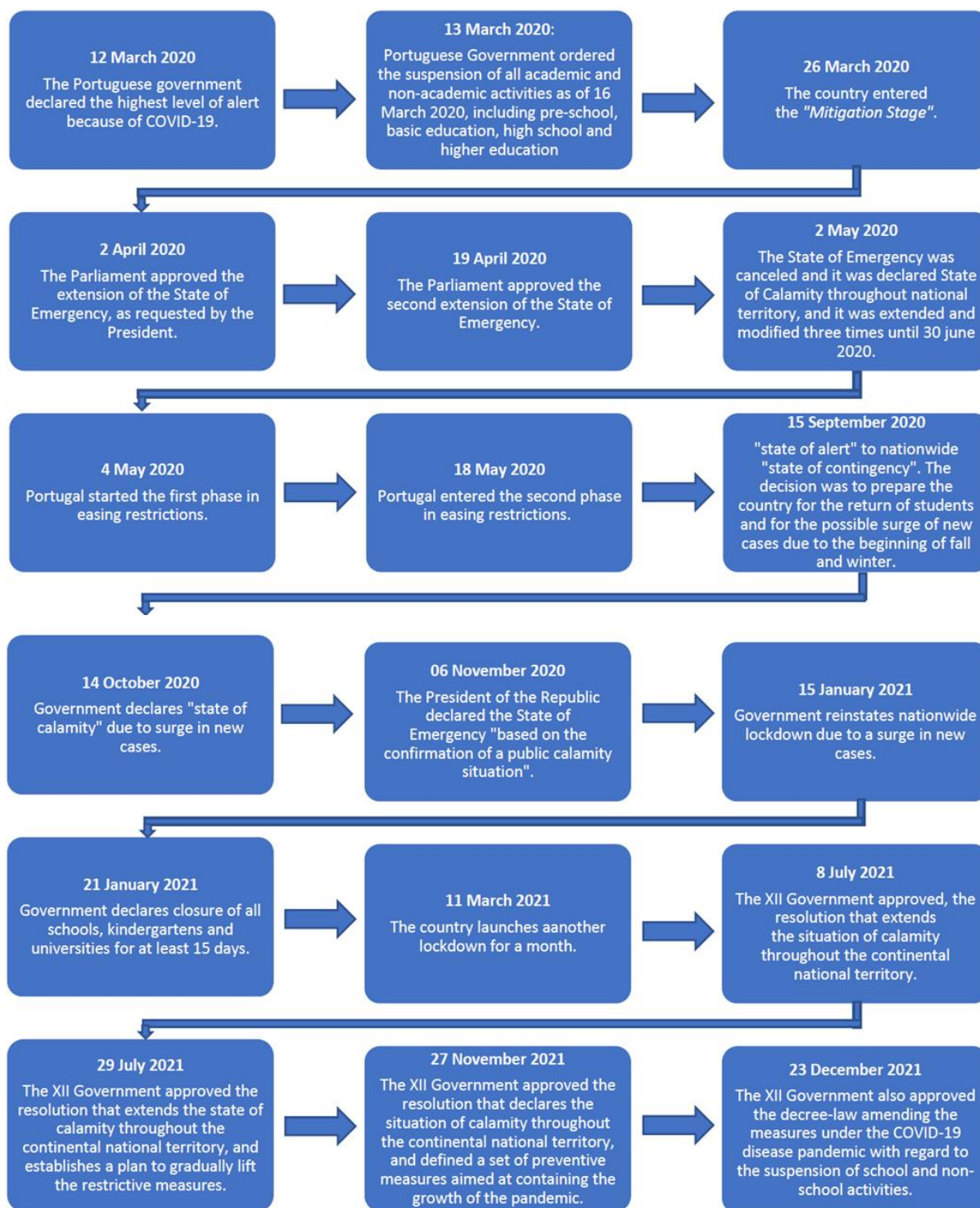
Population (2020)	10,295,909
Unemployment	6,5%
GDP per capita in PPS	79
COVID-19 caused GDP drop in Q2 2020	-13,9%
Gini index	32,1
Human Development Index	0,850 (40)
Government form	Unitary semi-presidential constitutional republic
Political orientation of the current government	Social democracy (Socialist party)

9.2.2 Characteristics of Portuguese Higher Education system

Population of students	347,000
Tertiary education attainment (2019)	36,2%
Student-academic staff ration in tertiary education (2017)	14,2
Number of higher education institutions (2016)	143
Public spending on tertiary education as % of GDP (2015)	0,75%
Fees	
Governance	
International students (% of total) (2018)	7,9%
Main international student origin countries	
Number of Institutions in ARWU 2020 Top500	3

9.2.3 The Pandemic in Portugal – overview and timeline

The pandemic reached Portugal in January 2020 and in March the Government decided to close schools, early childhood education and higher education institutions to reduce the spread of COVID-19. In response to education system closures, national and institutional authorities recommended distance learning and open educational platforms to limit the disruption of education.



Over time, some more specific recommendations and guidance were also released within the scope of higher education. Thus, during the first lockdown on March 13, the Portuguese Government ordered the suspension of all academic and non-academic activities. However, the first higher education institutions started their lockdown on March 7. On May 15, 2020, a recommendation was launched for scientific and higher education institutions to ensure the

process of phased and responsible reactivation of teacher-learning and research face-to-face activities. On January 21, 2021, considering the evolution of the epidemiological situation in Portugal, the Government decided to suspend school and non-school face-to-face activities, and the research centres and higher education institutions needed to temporarily adapt their activities to the new reality in line with the measures of the state of emergency. On March 11, 2021, a recommendation was launched to research centres and higher education institutions to implement a plan to lift the restriction measures. On January 7, 2022, school and non-school activities restarted.

9.3 Sustainability of higher education systems

The sustainability of the Portuguese system is analysed in the relationship between the national and institutional policies that deal with financial, economic, and social constraints enacted by the pandemic.

9.3.1 Policy and funding priorities

At the national and institutional levels, the redefinition of priorities regarding the sustainability of the Portuguese higher education system did not occur. There was a wide consensus that priorities did not change, and initiatives at the national and institutional levels were reactive considering the challenges the pandemic extorted.

The decrease in public funds and the general complaint of insufficient funding is a precondition that impinges on the differentiated effects of the pandemic on the higher education system and institutions (HEI_B_CA). In HEI_B, this insufficiency may put under pressure the capacity to raise funds from research and services to the community (HEI_B_AC_B1).

In HEI_B institutional priorities regarding the increased funding for students' social support to tackle the economic, financial and social challenges have been voiced (HEI_B_CA). Anyhow, the redefinition of internal resource allocation to address issues that the pandemic has raised is in line with a policy that the institution was already developing.

I know that there was a reinforcement and a distribution of funds to the area of social support, for example, but this had already been done since the beginning of this management team, under the presidency we currently hold. In other words, one of the options of our presidency was to increase the financing of social action, both through the attribution of scholarships to students who need them and through the increase in the offer of accommodation. And even before the pandemic, we created a specific programme based on a fund with all private contributions, both corporate and individual, which we call the Social Emergency and Support Fund, which tried and fortunately succeeded in supporting students who are on the fringes of grants and financing by other social supporting programmes. (HEI_B_CA)

Other pre-existing conditions regarding the massification of the higher education system and the ageing of the academic teaching staff were exacerbated by the effects of the pandemic.

From an interviewee's perspective (National_1), these conditions affect the increase of the number of students in the classrooms, mainly in theoretical classes and the decrease in the offer of optional courses.

This is extremely worrying because we have had, fortunately, in recent years, an expansion in the number of students in higher education, but the expansion in the number of academic teaching staff has by no means accompanied this expansion in the number of students. And we also know that we are dealing with a quite ageing professional group. So, let's think in the longer term, from the point of view of the future sustainability of the system. We have to take care not only of the number of academic teaching staff in the system but also of the number of academic teaching staff that may enter the system, who may progressively become part of the academic teaching staff of universities and polytechnics. (National_A1).

Corroborating this perspective, an interviewee from HEI_B voiced the argument that to tackle the issues of insufficient funds, the institutional policy has been to increase the number of students before the pandemic, but this raises questions regarding the quality of education.

The rhetoric of quality teaching, of excellence, is used (...) but the increasing number of students, or the number of vacancies, necessarily leads to a decrease in the quality of teaching.

Because if we assume that we are based on a more practical model, or supposedly, then the increase in the number of students is the enemy of a more student-centred practice, more individualised and with the possibility of actually being practical. But this is not new. It's not something that can be exclusively attributed to the pandemic, but that has now worsened.

At the institutional level, pre-existing conditions regarding the quality of education and research and institutional culture are key factors for HEI_A to successfully deal with the pandemic's effects. Actually, at the central administration level, the perception is that

The difference [in relation to other higher education institutions], from my point of view, is in the institutional culture. In other words, the quality that already exists from the point of view of research, from the point of view of teaching practices, and the modernisation of higher education, is what certainly makes the difference between higher education institutions and their response to the impact of COVID-19. I think that this is where the greatest difference lies or may lie. [...] in satisfaction surveys, many acknowledged the extraordinary effort made by the academic teaching staff to ensure the quality of the training. Therefore, a strong institutional culture has ensured that, naturally, with the flaws that we know there have been, but that in general, the response has been quite up to the standard. (HEI_A_CA_A).

Similarly, in HEI_B, the pre-existing structural infra-structures enabled the enhancement of the support for distance learning, underlining the importance of a pedagogical orientation toward the successful use of technology (HEI_B_AC_B2). At the same time, at the HEI_A, there is the perception at the middle management level the funding of projects dealing with the mobility of the students and managed by the international relations office were redirected to the consolidation of infrastructures creating rooms with better audiovisual infrastructures (HEI_A_MIDD_A1).

9.3.2 Internationalisation

Regarding internationalisation, there is a consensus among interviewees that physical, face-to-face mobility activities have ceased. In line with this, mobility has been significantly affected, particularly for international students. Some emphasise that physical immobility has given rise to greater online versatility, allowing members of academic communities to participate in

events in different countries. In turn, the internationalisation of research was not so negatively affected, and alternative ways of online meetings/conferences were positive and enabled to keep ongoing collaborative work.

Interestingly, the consensus regarding the meaning of virtual mobility of students and academic teaching staff is gaining new momentum. In the perception of an academic of HEI_A (HEI_A_AC_A1), nowadays, there is a lot of talk about virtual mobility, which has been very common in distance education. However, in the wake of the pandemic, it seems that “synchronicity is already so ingrained in some contexts that it transforms asynchronous and synchronous training into blended training, which is quite different from before COVID-19” (HEI_A_NONAC_A2). As for this debate about face-to-face teaching, online teaching and e-learning, an interviewee underlined that “the European Universities Association, based on a survey, claims that “the "e" of e-learning should end, it is all learning. But learning in different ways. It's written there, and I agree. So there are universities that are more prepared for this, and there are less prepared universities, but that's policy and vision” (HEI_A_ACA_B2).

Interviewees at the national and institutional levels (e.g. National_A1; HEI_B_NONAC_B2;) pointed out the advantages of online communication in non-physical activities. These advantages include the possibility to involve “more experts in the areas and/or bringing together more participants sharing of experiences from several different universities, which is an advantage” also promoting the feasibility of providing possible public access to the information in an asynchronous way or to review the contents for those participating (HEI_A_NONAC_A1). By the same token, a trend toward an exponential increase in distance education was identified. This increase “allowed a much more even ambitious international communication than the Erasmus programmes, for example, allowed since the financial means are reduced about physical mobility” (HEI_A_MIDD_A2). This has been reinforced by academics of both institutions (HEI_A_AC_A1; HEI_B_AC_B2) that referred to events including the hybrid format; both lecturers and students can participate because they can only attend at a distance otherwise, they would not have participated. However, virtual mobility only brings part of the benefits of mobility (HEI_A_AC_A1).

From the perspective of the central administration of HEI_A (HEI_A_CA), European initiatives are expected to provide a stimulus to virtual mobility (e.g., webinars, or courses or credited training courses (three, four or six ECTS credits) that the students have already done

in an intensive format in HEI_A. Actually, “more than one thousand three hundred students have already performed virtual mobility, which is absolutely extraordinary. Around 800 students have already had a virtual mobility experience and based on students' evaluations, on average students were highly satisfied (4.6 out of 5)” (HEI_A_CA).

In contrast, the central administration of HEI_B underlined that in terms of financial sustainability at the institutional level, virtual mobility does not have a great interest because tuition fees for virtual activities are lower (HEI_B_CA).

9.3.3 Differences within the sector

From the perspective of the central administration of HEI_B (HEI_B_CA), the discrepancies between universities and polytechnics did not underline a stratification trend in relation to the emergency reaction of remote education. However, it should be noted that the surveyed higher education institutions are both located in an urban area and are amongst the largest institutions in Portugal. The higher education institutions located in the country's interior may have great difficulty effectively attracting students and remaining as reference poles in their regions (National_A1).

What seems to be the catalyst around which there is a consensus is that the transition to distance learning has not been made so far, and joint initiatives were trying to mitigate the fact that no national initiative was directed toward the pedagogical and didactic aspects of the training of academics in Portugal (e.g., HEI_B_CA, HEI_A_AC_A2). Interestingly, the lack of national policies for distance education can be seen as a pre-existing condition promoting the reaction to remote education in times of COVID-19 exacerbating inequalities in the system that will be indicated below.

All in all, as pointed out by the central administration at the HEI_B there was a confluence of efforts between universities and polytechnics in the wake of the pandemic

In the beginning, I think that each institution closed in on itself. Each institution closed its doors, closed its house and said "we have to save, we have to save ourselves, how are we going to do this?". The next moment, we started to look at the neighbours and we started to realise that maybe we could receive and provide help for the neighbours.

(...) So there was a moment of solidarity, then we began to receive and exchange information with teachers from other institutions, other polytechnics, and other universities and things began to be more. There began to be the awareness of community, of co-construction, shall we say, co-construction. I think this is the term (HEI_B_CA).

Hence, the collaboration within the sector in the field of education resembles other cooperation activities that already exist in research, underlining that they can be consolidated in the future.

9.3.4 Inequalities in the sector

Social class is the factor that, according to the interviewees, has contributed the most to the increase in inequalities, with the most disadvantaged being the most severely affected by the pandemic in both higher education institutions surveyed.

The pandemic has accentuated inequalities, and pre-existing structural factors associated with economic and social conditions make access to higher education more difficult for some social groups. According to the perception at the national level, the student population has expanded, and so has the number of students who work and study and of those combining these two activities. As this situation is a question of economic necessity, the pandemic has worsened worker-students' conditions in the interviewees' perception. Actually, “as many of these worker-students occupied precarious positions that they lost” (National_A1), the conditions for remaining in higher education have changed.

From a different angle, inequalities in the sector and within institutions in relation to the assessment of students (HEI_A_AC_A1) and related to the lack of preparation of academic teaching staff and the nature of academic disciplines adapting to distance education varied immensely, creating inequalities for the students (HEI_A_AC_A2).

9.4 The purposes of higher education institutions in society

9.4.1 Science

At the national level, the perception (National_A1) is that the pandemic contributed to highlighting the tension between the plurality of purposes of higher education and the narrow perspective of higher education meeting the needs of the labour market and the role of applied research in solving concrete problems. However, in HEI_1, at the institutional level, from the perspective of the middle management, the pandemic and the alleged rapid response in discovering and producing the vaccines proved the value of basic science. Actually, “this current pandemic situation has shown that it has been an investment or a credit so that, when necessary, it can be put at the service of society. And this perception is very important, as is the fact that we have a wide range of scientific roles working on the pandemic, from the component more linked to the study of the disease itself, of the virus itself, to the development of vaccines” (HEI_1_MIDD_A1).

From the perspective of how society discusses the role of higher education institutions during the pandemic perceptions regarding the contribution of research to decision-making processes related to COVID-19 and the provision of expert advice to build public opinion, there is a contrast between the perceptions. While from the perspective of top leadership (HEI_B) national authorities, social media are not reinforcing the role of higher education institutions to deal with the pandemic, the interviewee (National_A2) underlined the interdisciplinary collaboration (e.g., publications, supervision of students) existing before the pandemic as an important factor to support policy decision-making processes regarding the cooperation of the department of mathematics (IES_A) and the Administration of Northern Region of Health to tackle the monitorisation of the pandemic.

Furthermore, from this cooperation, a communication strategy is seen as a critical success factor as accurate information and knowledge to reach the public opinion was key. An enlarged group of academics designed that strategy, and it might be expected that knowledge and evidence-based decision-making would create the conditions so that we can adapt, as emphasised by an academic (HEI_A_AC_A1).

There seems to be a widespread belief that the pandemic has reinforced the importance of science and specialised knowledge, including knowledge in health and life sciences and the social and human sciences, arts and humanities. From the perspective of HEI_B the support provided to national care centres in assisting with tests and vaccination contributed to bringing to higher education institutions the society in general and fulfilling the society's expectations (HEI_B_MIDD_A1; HEI_B_NONAC_B2). From the perspective of HEI_A the awareness of mental health problems is also an area where multidisciplinary approaches will flourish in the future (HEI_A_CA_A).

9.4.2 Education

Considering the fact that the overall reaction of higher education institutions was to keep remote education during the pandemic, the role of higher education has not been challenged in society. This means that this reaction met the expectations of society regarding the mission of higher education institutions.

No specific strategies have been identified regarding the dropout rates and the decrease of the number of international students. In contrast, there is a greater awareness about continuing education within both institutions, and the experiences gained by using distance learning models is expected to impinge on the diversity of the offer.

Anyhow, it has been recognised by interviewees that it is still too early to assess the true effects of the pandemic on education and the way society perceives higher education differently in the aftermath of the pandemic. A critical issue in public opinion appeared to be the assessment of students online and data protection issues. Related to the effects of the pandemic, both institutions are developing follow-up studies to analyse its impact on students.

9.4.3 Labour market

The pandemic caused changes in the job market, with the reduction of certain professional activities and increasing others. Interestingly, in the field of arts and communication, the perceptions are that the pandemic may induce a greater awareness of the labour market for communication (HEI_A and B) as “companies identify an increased need to communicate and that an area of investment in the level of demand for workers goes to areas that are very much

in the area of design, communication and so on” (HEIA_MIDD_A2). From a different angle, the expectation is that higher education institutions and the labour market will be more involved. Even so, the idea that students acquire the competencies necessary to face these labour changes throughout their academic path seems to predominate within both institutions. However, professional training in some degree programmes may be affected, and the worst fear is related to practical training and internships.

9.4.4 Relations with society

Considering the relations of higher education institutions with society, at the institutional level, the role of arts beyond science has been voiced as a role focusing on cohesion and contestation regarding the problems and issues the society was facing during the pandemic. In this sense, “the pandemic also contributed to greater attention on the part of artists, to direct their work towards those areas of greater emergency. And emergency in the sense of urgency and accentuating this role of contestation, of activism, which characterises a large part or much of artistic production (...). It is clear that an entire ecosystem of arts and culture is aware of this and therefore gives more visibility, more voice than would be the case in other circumstances” (HEI_A_MIDD_A2).

Another example of establishing relationships mediated by technologies is the Job Fair held at the HEI_B, which was totally digital, and had never happened before. The interaction did not increase; rather experiencing different ways of doing things will impact future activities (HEI_B_AC_B2). At the HEI_A, the potential to take the opportunity of continuing education using the institution’s distance education platform is seen as a golden opportunity (HEI_A_NONAC_A2). However, a critical perspective regarding the involvement of higher education institutions with society through technologies has been expressed as “the need somehow showed that there were other possibilities to explore certain strengths of what is done inside higher education institutions. But it is very limited. I think it's very limited in terms of the nature of what you can communicate, and teach and learn at a distance, online. So the nature of the topics and of the themes is limited” (HEI_A_MIDD_A2). It seems that the pandemic catalysed the opening to society, but there is still some work to be done. Mainly because our language, our objectives, often do not fully coincide with those of the industry” (HEI_A_MIDD_A1), a view that is corroborated by one of the interviewees in expectation and

closer relationship between higher education institutions and the labour market (HEI_ACA_A1).

At any rate, the prospect of a higher education institution without walls appears to be utopic since “The university has changed a lot in recent years, but it has also become very bureaucratised, administrative, we are very involved in organisational issues that take away the freedom of the mind to debate for debate's sake. We don't have time to debate for debating's sake” (HEI_ACA_A1).

9.5 The workings of higher education institutions

9.5.1 Distance and online education

In 2019, before the pandemic, the government passed the legal framework for distance learning in higher education. The drivers of this new legislation can be found in the promotion of high-quality higher education in the Portuguese language worldwide, especially in the regions of main influence in Lusophony. The stimulus of distance education and learning in higher education institutions is clear, and the potential re-orientation of higher education institutions' strategies towards adopting this alternative model for the qualification of students outside the reference age is clear. However, it goes without saying that in the perception of one of the interviewees, regulating the specificities of distance education is not a common practice worldwide (HEI_A_ACA_A2). In Portugal, there is only one public distance higher education institution founded in 1988. The legal initiative to regulate distance education in Portugal was seen to require this institution to comply with the newly established criteria to evaluate and accredit the distance education model in Portugal by the Quality Assurance and Accreditation Agency (A3ES). All in all, in HEI_B it has been reported that, before 2019, there were no regulations for distance higher education, and the offer of postgraduate programmes (not degrees) was freely created and attracted a considerable number of Brazilian students, yet before the pandemic (HEI_B_ACA_B2).

This context features an *emerging* pre-existing condition related to the need to comply with specific requirements ruled by law regarding the approach to remote education, which was the

prevalent strategy in reaction to the pandemic. After launching a call for degree programmes in accordance with the legal framework, the A3ES received 120 proposals. The interviewees said that the experiences of distance education during the pandemic induced consideration regarding future proposals for degree programmes operating in hybrid formats (HEI_B_NONAC_B1).

Regarding the workings of remote education during the pandemic, at the HEI_A, the use of the moodle platform increased from 30 to 80%. Since this is seen as emergency remote learning, many effects are unlikely to linger into the post-pandemic period. Still, there are some changes that could be maintained: predominance of online meetings, online vivas and much more b-learning and hybrid formats.

Interestingly enough, pre-existing conditions regarding the infrastructure “exalted what you can do. In general terms, we have never seen so much happen online” (HEI_B_ACA_B2). However, the lack of an extensive debate raising the awareness of the problems of learning, didactics, and andragogy is needed rather than focusing on using technology as a remedy or a solution (HEI_A_ACA_B1).

Unexpected successful experiences regarding the use of pedagogical devices already in place have been reported in the field of engineering. Actually, remote laboratories gained new visibility in contributing actively to the autonomy of the students. As expressed by an academic at the HEI_B “since students by using the remote labs, they already understand how it works and can test without messing it up and without fear because they can do it several times until they understand. And really when they go to the traditional lab situation, they do much more autonomous work” (HEI_B_ACA_B1).

In the perspective of the middle management of HEI_B “So there was this capacity to want to react. However, I think that after that initial impetus and many innovative experiments, which were innovative and even rewarding and were working, then we started to slow down” (HEI_B_MIDD). At the same time, this reaction might be seen as an opportunity to rethink distance education, curriculum management and professional academic development, focusing on pedagogical competencies (HEI_B_CA) and the use of digital information (HEI_A_ACA_B2).

In line with the opportunity to rethink remote education and the usefulness of digitalisation of means to teach and learn, an interviewee underlines that “If digital media is one more tool, great. There is a lot of potential for growth. There are means that are triggered, that has not been triggered before because it had not even occurred that they could be triggered and that necessity, shall we say, has been unveiled as a possibility” (HEI_A_MIDD_A2). To some extent, this view reflects the fact that the need to adjust to digital media has no drawbacks, and therefore the advantages were imposed as advantages. However, as also highlighted “It became clear that using digital media never replaces face-to-face. It does not work”. So digitalisation is also a pre-condition that “we already knew existed, it was not exactly a great discovery by itself but allowed us to see the potential for development” (HEI_A_MIDD_A2).

9.5.2 Work of academics and support staff

In general, it seems that there was a concern centred on meeting the students’ difficulties. However, in the perception of the middle management (HEI_A_MIDD_A2) the concern surpasses the teaching and learning processes. In fact, it was necessary to guarantee a degree of satisfaction on the students’ part with the work they themselves produced. In the field of arts, these unprecedented times lead to the development of projects whose objective was to “bring pride and satisfaction for having been able to, let’s say, and then giving visibility to that work (...) by asking or commissioning a tool from some of the employees here at the faculty and asking for the collaboration of all the teachers in order to make a film, a video, that would precisely show exceptional responses to an exceptional situation” (HEI_A_MIDD_A2).

From a different angle, the perceptions of changes affecting the academic work are seen in the emergence of the ‘instructor’ as the new figure of the professor (HEI_A_ACA_A2). On the other hand, the nature of the academic work seems to be affected by the need for the development of competencies emphasising, for instance, communication skills. Actually, “the teacher now has to be able to keep a student interested in a zoom window. And that is a challenge. And they have to complement that interaction with other activities that are interesting and engaging for students (...) lecturers have to be able to outdo themselves to make all that content they say interesting as well (...) Some people have more power of communication and some people don’t. But I think, increasingly, that skill is going to be and will have to be developed” (HEI_A_NONAC_A2).

Interestingly enough, from the perspective of academics, the overcoming of these drawbacks associated with the potential inexistence of the right competencies and skills is to be developed from within peer group sharing. Greater awareness about the support from staff from technologies departments in overcoming technical difficulties might be expected to emerge in the future. However, there is a pre-existing condition associated with the quality culture of scientific disciplines and the value of knowledge production by itself that influences the involvement of support staff in the design or co-creation of teaching and learning methodologies (HEI_A_NONACA_A2). This weakness has been overcome at the HEI_B by a *modus operandi* based on ‘peer-to-peer’ approaches (HEI_B_ACA_B2).

Furthermore, after a period of isolation between higher education institutions, institutions connected more actively in trying to share practices and experiences and learn from each other (HEI_B_ACA_B2). These spaces support the professional development of teachers valuing pedagogical work and allow the sharing of pedagogical experiences, which enable teachers to work together collectively and as a team (National_A1). These spaces are probably the answer that can emerge from within the institutions rather than imposed by the ‘outside’. This strategy would allow the institution to “reconfigure their pedagogical and curricular practices, their ways of organising their teaching activities and their training sessions” (National_A1). In line with this, at the HEI_B the structure supporting specialised technical consultancy is managed by academic teaching staff from all polytechnic schools, and in each school, there is a representative who acts as a bridge between the e-learning unit and the school itself. This means that at the HEI_B there are ‘interdisciplinary and multidisciplinary discussions to prepare the training of colleagues’ (HEI_B_CA). Interestingly enough, also other forms of collaboration between academic teaching staff have been developed in both institutions surveyed based on the tools of collaborative work sharing documents, videos and other material supporting teaching and learning (HEI_A_ACA_A1; HEI_A_ACA_B1).

9.5.3 Duty of care

In both institutions surveyed the duty care (social, economic, psychological) was mainly aimed at students. The logic of action in both institutions was more on a case-by-case basis and established on proximity, rather than through the development of standardised institutional processes and procedures (section 1 complements this topic). Anyhow, students were not included in this study and their views on the efficacy of the services provided were not

considered. This issue is also relevant for international students, whose tuition fees are higher and the means to counteract the negative effects of the pandemic might challenge institutions in different ways.

9.5.4 Governance and decision-making

The pre-existing condition regarding the changes in governance and management of higher education institutions in Portugal have been extensively researched and the prevalence of managerial approaches over governance is evident with consequences in the development of Portuguese higher education institutions' missions. However, more accurately, in the second lockdown (2021), the pandemic context brought forward the worsening of personal conditions (e.g., emotional, psychological) to deal with uncertainty and the demands of internal and external stakeholders.

At the HEI_A, it has been identified that the digitalisation of procedures may reinforce a certain autocracy of the leaders. The lack of discussions due to timing constraints and the need to redirect strategies towards remote education impinged decision-making processes featuring top-down management. At the HEI_B, pre-existing conditions associated with the managerial approaches were exacerbated by the need to control teaching and learning processes impinging on academic freedom. Sometimes, the guidelines were conditioning what happens in the 'classroom' to the extent to which the number of synchronous and asynchronous hours were under surveillance and attempts to control the performance of academic teaching staff by the students were made. From an interviewee's perspective (HEI_B_MIDD_B), the lack of trust was made visible in pandemic times.

In a general sense, despite the attempts to involve internal stakeholders in the discussions and the decision-making processes, centralisation and hierarchisation of decision-making processes exacerbating a pre-pandemic trend were, from the perspective of interviewees, present in both institutions.

Counterbalancing these trends, from the perspective of an interviewee, there are collaborative tools at our disposal that

COVID-19 may have taught us, is the use of collaborative tools, shared documents in which everyone can contribute, bringing everyone to the same level in the discussion, even people who at first would be more distant from the processes (...) I know examples of institutions that tried to ensure this participation, collaboration and discussion among all, (...) but everything depends on the human resources higher education institutions have and on the capacity of institutions to adapt to circumstances (HEI_A_ACA_A1).

The significance of the means, however, depends on the collective will to achieve a consensus on the basis of a plurality of views, which is at the core of higher education.

9.6 Conclusion

The analysis of the relationship between the national and institutional policies that deal with financial, economic, and social constraints enacted by the pandemic emphasises national and institutional measures to support the students. In turn, a collective awareness following-up the question about how/if polytechnic and university institutions had felt the pandemic differently or had reacted differently, there is a convergence regarding the need of a collective reflection on how higher education institutions are going to react together, universities and polytechnics, to this challenge.

The analysis of the purposes of higher education institutions in a society raised mixed perceptions regarding the role of science and knowledge in dealing with the pandemic and the quality of emergency remote learning, social justice of students' assessment. Anyhow, it is expected that the relationships between higher education institutions and the labour market become closer and the relevance of new areas of training will gain visibility. The role of technologies mediating the interaction between higher education institutions and society is critical. Either because technologies limit the variety of topics and subjects to be discussed, or the time academics and researchers can devote to discuss, is quite limited due to changes in the governance and management of higher education institutions.

In turn, the analysis of the workings of higher education institutions while emphasising the role of higher education institutions as *complete* organisations highlights higher education as an institution emphasising that higher education institutions serve as structures constraining the action and as constructs created and changed by institutional actors. This is of importance because the issues under scrutiny - distance and online education, work of academics and support staff, the duty of care, governance and decision making - are influenced by the dissemination of political, social, cultural, economic, technological ideas which drive core principles regarding the role of higher education. However, from the institutional perspective, the role of institutional actors, who, in the pandemic age, is brought forward to promote a vision about the future of higher education.

9.7 References

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Chapter 10 Conclusion and summary

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10.1 The sustainability of higher education systems

10.1.1 Policy and funding

The analysis of research findings underlines the continuity of existing concerns regarding the financial sustainability of higher education systems surveyed and the possibility of the pandemic emerging within an already existing crisis outlining pre-existing conditions across the countries surveyed.

Within the countries in which higher education is more financed by the state and not by private institutions the analysis of the national reports revealed that there have been no major changes with regard to the structure and the sum of funding by state-funded programmes as seen for example in Germany, Finland and Portugal. This study also includes countries representing a higher degree of privatization and a higher dependence of the system on tuition fees. The England report shows, for instance, that funding policies are shaped by financial uncertainties regarding, for instance, the potential to attract foreign students. The recruitment of international students and the differentiated structure of tuition fees is a major concern for UK universities given the impact of the pandemic in the students' ability to come and study in the UK.

A more nuanced picture of changes within the system is brought forward in the Hungarian report highlighting that former trends within state funding have been accelerated during the pandemic. Actually, the Hungarian government, 'followed the aim to increase labour market relevance of higher education and efficiency of institutions before the pandemic'. The German report hints at content-wise changes within funding programs run by the government. Interview partners in Germany pointed to the growing number of calls on pandemic-related issues, and they were concerned about the lower significance of ideas not related to such themes. The

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Danish and the Portuguese reports underlined tighter control as already existing before the pandemic and the French case highlighted excellence and international competitiveness driving funding policies. The Finnish report pointed out research and innovation funding as a national priority. In the Irish report, there is a view in government now that there isn't any more room to cut. It may indicate something of a turning point.

By looking at national and institutional funding policies and priorities, it appears that no significant changes in national and institutional priorities emerged. However, an institution-wide reform of master's provision (Denmark) or the regulation of distance education in Portugal before the pandemic is giving rise to more hybrid learning models. Additional funding (temporarily improved) to tackle technical and infrastructure insufficiencies materialised across the countries surveyed. These measures guaranteed the shift towards the technological means to sustain education, research, and engagement with society.

10.1.2 Internationalisation

Regarding internationalisation, three major developments have been highlighted within the reports: consolidation and acceleration of pre-existing discourses; a decline of internationalisation in some areas; and digital stimulation of internationalisation in other areas. The first finding in different reports concerns the consolidation and acceleration of pre-existing perspectives on internationalisation. One aspect is the high value ascribed to internationalisation in academia. Mobility and collaboration are perceived as pillars of academic life and make scientific invention possible (see, for instance, the German report). This value has been highlighted during the pandemic. Another aspect refers to the role of internationalisation in competition. Internationalisation also refers to attempts to win the most talented students and researchers or even star scientists for positions in a particular country to get or keep a leading position in international competition (see, for instance, the Finnish and Hungarian report). Therefore, the importance of internationalisation to remain or become competitive has also been highlighted within perspectives during the pandemic. From the perspective of the financial sustainability of higher education systems, there is the possibility of anticipating fears of a decrease in international students, as reported in the report from England.

The second finding refers to a decline of internationalisation in academia whenever it needs physical face-to-face activities. Student mobility is one major issue (see, for instance, the French report). The numbers of incoming and outgoing students drastically declined across all the countries surveyed. But this issue also refers to every other aspect of international cooperation, including travel activities, for instance, conferences or activities in international research projects. At the institutional level, a tendency was visible to increase participation in internationalisation activities, but the quality of relationships decreased, as recognised in the Portuguese report.

The third finding concerns the digitalisation of academia and how the new digital opportunities could at least foster internationalisation in some regards, even though people are aware of the losses if they are unable to actually meet. In each report, we find traces that programmes and activities launched online opened opportunities for the participation of people around the world. To some extent, even those who would not have come in person due to time issues or financial costs. Therefore, digitalisation opened new opportunities in terms of internationalisation during the pandemic, even though the overall tenor is that this could not compensate for the losses. The concepts of virtual mobility and pedagogical practices directed towards international students have gained centrality for crisis management at the institutional level.

Furthermore, (de)internationalisation was seen as an essential topic in national and institutional agendas. In Denmark, for instance, this reflects continuity in existing developments before the pandemic in the surveyed higher education systems. In other countries challenging internationalisation beyond metrics and rethinking its activities as networking, collaborating, and establishing strategic partnerships have become more relevant. In Ireland, rethinking internationalism and what it is for has gained new momentum.

Therefore, it appears that a collective learning process around the value of internationalisation should consider the centrality of networking, competition, and collaboration.

10.1.3 Differences within the sector

The country reports point out that few differences were observed between higher education institutions. Size, location of higher education institutions and structural underfunding of

higher education systems emerged as factors that differentiated the effects of the pandemic. However, these factors did not play a major role in how higher education institutions responded or have been affected by the crisis (as far as the limited sampling in these cases – typically 2-3 different institutions allow us to conclude).

Some countries' reports mention differences between larger and smaller institutions. The French report documented, for instance, that the better endowed higher education institution, such as the Grand Écoles, already had more experience with distance learning and could respond more quickly.

The major point in the reports concerns differences between subjects instead of institutions. All the countries surveyed mentioned difficulties with more practical fields and some programmes (e.g., arts, sports) and practical training (e.g., physiotherapy, medicine) were more difficult to adapt to online platforms. The Finnish report refers to health care and culture as examples, the Danish report identified problems with education of welfare-state professionals and the Hungarian report also noted subjects that included practical exercises. The German report gives empirical examples in engineering, product design and sports. The analysis of the countries' reports also showed that these differences between subjects also document that universities of applied sciences or polytechnics in Portugal face more complex challenges since they offer more courses on practical subjects in which online education is rather difficult.

10.1.4 Social inequalities

Across the higher education systems surveyed, inequalities before the pandemic strongly increased, raising the vulnerability of at-risk groups (e.g., international students and researchers, females, worker-students) and affecting parenting, age and chronic illness. In most cases, disadvantaged groups have been more affected by the pandemic than others (see Finland, France, Portugal, and Germany). The Danish report provides evidence that the staff most affected were (especially single) parents of young children, newly appointed staff without teaching experience, and people living alone. The students most affected at the university college were on programmes with the lowest admission requirements who were not so disciplined or able to manage their day, and those starting during the pandemic who had just

moved to a city, without friends or networks. On the contrary, some introverted students blossomed through online education.

The principle of amplification also led to new or more intense recognition and valuation conflicts (see German report). This concerned the definition of government priorities towards the groups that should receive more benefits at societal, institutional, and organisational levels. More precisely, the reports name groups which struggled harder during the pandemic and thereby point to social inequalities. Examples of disadvantages are students dependent on income generated by part-time jobs (that they lost during the pandemic), parents (and the additional time needed for caring), and people in precarious jobs (having fewer opportunities to improve their situation).

Differentiated impacts of the pandemic on students, academics, and support staff are contingent on individual contexts and conditions. Crisis management regarding continuing inequalities concerning the gendered effects of the pandemic in terms of work-life and intersectionality may become a significant policy issue in the future.

10.2 The purposes of higher education institutions in society

10.2.1 Science

A public understanding of higher education towards the public financing of the system was gaining visibility across all higher education systems surveyed. At the same time, a narrow perspective of higher education's roles focusing on employability and the application of research challenges the plurality of higher education and research purposes. This narrowing of the role of higher education systems while widening a societal discussion about science and knowledge production raises questions about the usefulness of research; what does research mean? And for whom? For instance, the 'usefulness of research' gained visibility in Finland and Portugal.

The interaction between research and innovation also gained visibility. Most reports observe a growing role of science in academia. The French report highlights that there is undoubtedly an increasing interest in science in the public space and the Portuguese report argues that there is a widespread belief that the pandemic has reinforced the importance of science and specialized knowledge. The German report documents a development during which university professors became critical experts that contextualize and make sense of expert knowledge for the public in the media. Hence, the reports showed that the role of science in overcoming the pandemic had been acknowledged by the public.

However, critical voices have also been raised on different interrelations. In the Irish report, there is evidence that some stratification regarding scientific advice is gaining traction. Additionally, the role of different disciplines is being emphasised, so it's not about 'science' as *Wissenschaft*, but science as STEM. The Finnish report argues that the importance attributed to science in the discussion is not mirrored in the government funding and the current resources. The Hungarian report argues that research activities unrelated to the pandemic faded into the background. The German reports documented critical perspectives on the role of universities, given that many inventions took place in private organisations rather than in research universities. The Danish report shows that after the end of the lockdown, there was deep frustration among staff and students about the lack of political recognition, as seen in the post-pandemic labour dispute between nurses and the government over recruitment, working conditions and pay.

The pandemic brought science's importance to the forefront of public discussion, but if it causes systemic changes in academia (and if it does, what might be changed) remains subject to diverse discussions. New roles of science and new contexts outside higher education institutions have earned societal recognition, raising questions about distinguishing between scholarly and non-scholarly sources and overseeing quality control.

10.2.2 Education

The quick reaction of all higher education systems and surveyed institutions in moving to online teaching reflects higher education's commitment to education and students. However, remote teaching was seen as an emergency despite efforts to adjust some content of classes

online. Teaching models changed, but the role of education in society did not change in different countries.

As it happened when addressing internationalisation topics and the adequacy of pedagogical practices for international students, teachers' and students' lack of digital competencies are explicitly highlighted to develop adequate pedagogical practices for online formats, as was the case in Portugal and Hungary. This aspect is relevant for managing a constant potential crisis where a future vision does not see education only in an online format but in a hybrid form.

The only exception is probably the growing acknowledgement of higher education institutions' role in caring for their students, which came to the forefront in different reports (see Hungary, Portugal). Additionally, the question of which changes in teaching methods should stay and which should go after the pandemic is of interest in different reports (see Hungary, Portugal, Germany) is discussed. The Danish report informs about many examples of teachers' innovations and collaborations. Student counselling increased and found new approaches and successfully adapted to 100% online. Still, data analysis cannot give clear answers regarding effective changes. In single cases, concerns concerning a reduced value of diplomas on the job market are identified as an example of changes concerning the role of teaching in societies (see France). Regarding the digitalisation of education, it is worth mentioning the Finnish digital leap reinforces a pre-existing condition in the higher education system.

10.2.3 Labour market

During the pandemic, practical training and internships have been severely affected, due to the challenges organizations in very different fields faced, as well as the community's integration into academic activities. Concerning the labour market, the biggest similarity between the cases is the decline of the GDP in European countries and the resulting difficulties in finding or keeping a job. Finding a job is especially noted in the report regarding students graduating and those trying to get an internship or practical training during their studies (see Portuguese and French report). Losing a job has been especially noted as a problem for students dependent on the money from part-time jobs (see Hungarian, French and Portuguese reports). At the same time, the reports document how governments have been aware of these problems and how they

have taken measures to reduce the impact of the pandemic as far as possible (see French and German reports).

10.2.4 Relations with society

The research findings reveal the amplification of pre-existing trends associated with the influence of private-sector education providers and companies and right-wing populist movements that raise questions regarding the vision of higher education in society. Such amplification processes can be negative and increase the distance between some societal groups and higher education institutions. Some research partners refer, for instance, to right-wing populist movements which had already announced doubts before the pandemic and used ambiguous research findings or misinterpretations of studies to raise questions regarding the role of universities in society (see German report).

However, the results in the reports also point to calibration issues. Given the role of science in society (partly demonstrated by the challenges of the pandemic), the question of public funds for higher education in relation to its contribution to society is discussed in different countries differently (see, for instance, the Finnish and the Portuguese report).

Finally, different reports point to the intensification of communication between science and society, given the presence of scientists and scientific communication in the media. Most reports mentioned the role of scientists as experts in the media and pointed to the effects of having such ‘(media) star scientist’ omnipresent in newspapers and television. The societal relevance of education and research displays its availability rather than its potential impact on broader changes in patterns of social justice and social, educational and economic inequalities.

10.3 The changes affecting academic work during the pandemic

10.3.1 Distance and online education

Perceptions about the transition to online learning vary between those who say it was a successful transition and those who indicate it was chaotic. Some reports argue that even

without friction between academic and administrative staff before the pandemic, the transition to online teaching was well organized and well managed (see the Finnish, German, and Danish reports). Others saw a more chaotic transition (see the French report).

More generally speaking, all reports document that (in contrast to schools) higher education institutions had already had some experience with online teaching. In the Portuguese case, the government's strategy was to expand Portuguese teaching to other Portuguese-speaking countries. In other European countries, online teaching was experimental and done punctually in digitalisation projects. Hence, there have been different experiences, knowledge, and structures. But while most teachers at universities did not include online teaching before and preferred other teaching methods, online teaching expanded in almost every niche of universities. This process profited from pre-existing experiences.

Another finding in the reports is visions of how the role of teachers changed during the pandemic. It is discussed how far online teaching only carried lectures to the virtual spaces and will end after the pandemic or how far teaching techniques led to innovative approaches, changed the teachers' roles and may become permanent changes. However, there is no precise picture of which changes will go and which will stay. Some reports also were concerned that changes will be determined by political, economic, and financial considerations instead of teaching quality (see Portuguese report).

Additionally, the pedagogical dimension of distance and online education is brought forward. A digital learning trend visible in the availability of infrastructures and technological equipment in place before the pandemic accelerated the shift to online education and is expected to impinge on the hybridisation of teaching and learning models. A high grade of satisfaction concerning the administrative support for switching teaching to online format has been underlined, for instance, in the Portuguese, Danish and Hungarian reports.

The potential of digital learning is relevant for managing opportunities regarding continuing education programmes, the interaction with labour market needs, and engagement with society. Moreover, higher education institutions surveyed (e.g., Denmark) barely debated the ownership of the data generated by education and communication platforms.

10.3.2 Work of academics and support staff

Digitalisation changes also had implications at the level of increasing the workload for teaching staff and students and provoked a worsening of individual conditions (burnout, isolation, mental health, dropout). This changed attitudes towards student assessment, for instance.

Concerning the work of academic and support staff, three major developments can be identified in the data. The first one summarises the negative effects of the pandemic on workload and work-life balance. The Finnish report mentions, for instance, the enormous number of Zoom meetings and how short the breaks were in between; the French report also mentions a surplus of administrative work through providing support to students. The German report mentions losses through a lack of social contact and a decline in creativity. The second major development summarises changing roles of academics, especially concerning teaching. The Portuguese report talks about a new role of the professor as an ‘instructor’ and a wide range of possible roles which depend on how teaching has been transported into the virtual space, including aspects of copying, simulation, and moderation. The third development points to positive work and work-life balance aspects during the pandemic. The German report, for instance, includes quotes about rising flexibility and additional time without the need to travel. Likewise, the Hungarian report mentions benefits for family issues through online work (even though, regarding career issues, this is interpreted as a difficulty regarding social inequalities).

10.3.3 Duty of care

Across the higher education institutions surveyed, the duty of care for students came to the front line. Institutional leadership, teaching staff and support staff provided care concerning financial difficulties, mental health concerns and technical assistance. Even if this issue is mainly related to students, as the Hungarian and Portuguese case studies point out, there are also examples of how organisations care for employees. The Finnish case study reports that higher education institutions organised different kinds of virtual events and remembered their staff, for instance, with a Christmas meal delivered home. Walks outside have also been organized under the motto of keeping the distance.

In line with this, the higher education institutions’ duty of care is one of the general developments brought to the forefront by the pandemic in all cases. Questions have been raised

in the Irish report regarding the notion of who is doing the caring, who we are saying the university is, and also the role of students.

10.3.4 Governance and decision-making

In some countries' reports, top-down management expanded during the crisis (see, for instance, Portugal and Denmark). The Hungarian and the Portuguese reports describe, for instance, in detail that the digitalisation of governance and management procedures reinforced the hierarchisation of decision-making. The lack of discussions due to timing constraints and the need to redirect strategies towards remote education impinged on decision-making processes featuring top-down management. In contrast, the Irish report indicates, to some extent, there were improved relations between students and governance. This testifies to collegiality being in a stronger position than might be expected by popular discourses proliferating at the national level. Anyhow, in the Danish report, there are indications that more top-down and centralised decision-making may have affected the university's tradition of lively democracy and inclusive decision-making.

Changing digital formats has been perceived as a major challenge in all countries. In some countries, such as Germany, managers and academics recorded a high grade of satisfaction among managers and academics concerning this transition. In the English report, governance and decision-making appear not to have been affected negatively by the move online, according to participants. Instead, positives were identified, including greater inclusivity, speed and agility, while the setting up of new groups to report on specific issues (such as the resilient curriculum) brought to the fore by the pandemic enabled topics that had previously been ignored to be prioritised.

Finally, the Hungarian, Finnish, German and Portuguese reports, for instance, observed and discussed pragmatism as an element of crisis management. The Hungarian report talks about fire-fighting, the Finnish report talks about ad hoc responses to the challenges as a dominant governance mode, and the German report talks about governance approaches to reduce the pandemic's negative consequences being identified as vulnerable.

Pre-existing conditions, associated with the influence of managerial approaches to deal with education and research, accelerated digitalisation procedures. However, successful experiences using online collaborative tools may be helpful in the future to promote transparency, inclusion and engagement with decision-making processes in the future.

10.4 Way forward

What can we learn from reflecting on the data from eight different European countries and the impact of the pandemic on academia? When we started our project, it was without doubt that the pandemic was a critical incident for the European academic field. Public funding stringency measures affecting the education sector and the changing conditions of knowledge production had been reconfiguring academic work, and the pandemic was a crisis within other crises.

Firstly, the results of our study illustrate how pre-existing conditions exacerbated the developments during the pandemic not only negatively, as illustrated by the Irish case. However, social inequalities and the reconfiguration of academic, support staff and students' work, and changes in professional values while addressing the need to tackle new challenges to some extent deteriorated. This is, for instance, the case when the reports (e.g., Denmark, Germany, Hungary, Portugal) observed amplification dynamics. The development of social inequalities is such a case. Individuals with multiple obligations such as parental care or students who needed to work faced a more difficult situation than before, and these difficulties multiplied during the pandemic. Another example is the recognition of the role of academics and science in the perspective of right-wing populist movements. These issues have been present before the pandemic, but these movements tried to instrumentalise the situation to spread doubts regarding the role of higher education. Such examples already point to societal, organisational and individual developments.

Secondly, the central issue caused by the pandemic is probably digitalisation which is again relevant to all three issues. The way academia transformed is based on the shift from working and teaching face-to-face to working and teaching online, including changing roles of teachers and students. The way internationalisation declined or increased in some spaces depends on the opportunities and limitations of interacting online. Interviewees' most frequent thoughts about whether the pandemic-induced changes will go or stay after the pandemic concerned how

digitalisation had changed interactions between academics that formerly were face-to-face. Hence, the question of how far the pandemic as a critical incident changed the systems radically, rather than incrementally (as in the case of amplification) can only be addressed by referring to digitalisation.

Limitations of this study are associated with the number of higher education institutions per country and their geographical location, which might not comprise the diversity in both the national higher education system and the disciplinary areas within the higher education institutions surveyed.

The changes identified bring forward a crisis management issue at the national and institutional levels and the role of academic leadership, academics and support staff as ‘managers’ of the crisis. While crisis management strategies involved switching to online teaching, dealing with work-life balance and organisational crises addressing the need to switch to digital work modes in a short time drove pragmatic solutions to new problems and enhanced collaboration between academics and support staff.

Finally, by looking at the main elements of agreement regarding European policies focusing on the NextGenerationEU and the Recovery and Resilient Plans for Europe, it seems worth underlining that research and innovation, fair climate and digital transitions, new health programmes focusing on preparedness at the national and regional levels, modernisation of cohesion policies, biodiversity and gender equality are domains upon which changes at the system and institutional levels may occur.

The data analysis showed, for instance, that climate change, gender equality and cohesion policies have not been addressed by the research participants surveyed. Actually, academic work is contingent on face-to-face interactions, and personal contacts in conferences and other large-scale scientific events did not appear to change in a post-pandemic scenario to fight climate change. Precarious work in academia, which qualifies as an enduring challenge for European higher education systems, did not elicit the identification of national priorities to change the system. Instead, the efforts were to soften the effects of the pandemic. Last but not least, competition has been addressed when it came to higher education institutions trying to keep their competitiveness, for instance, by still hiring the best researchers during the pandemic. But the way competition structures the field did not seem to change and is not

discussed concerning a post-pandemic system. Instead, the discussion is about how to stay competitive in times of crisis, challenging the modernisation of European cohesion policies.

Appendix 1 – Interview guidelines

European Universities – Critical Futures: the effects of the pandemic on higher education

Interview guidelines

<p>Issue 1 <i>Sustainability of higher education systems – it refers to the composition of the higher education sector and the survival on key priorities of higher education institutions in times of the COVID-19 19 pandemic</i></p>		
<p>Topics raised under this issue</p> <ol style="list-style-type: none"> 1. European and national funding systems - (re)definition of research-funding priorities due to economic decline for the universities (e.g., competition,) 2. Increasing gender imbalance and precariousness of the academic profession, across the life course 3. (Inter) nationalisation - tensions between national and international roles of higher education, international (im)mobility, national politics, potential strengthening of neo-nationalist politics. 4. Discrepancies between mass universities and smaller higher education institutions 5. Increasing influence of digital governance perspectives 6. Changing national educational policy frameworks, governmental and institutional priorities to cope with (new) priorities (e.g. investments in college-buildings). 		
<p>Potential questions on these topics</p>	<p>Potential questions regarding the pre-existing conditions</p>	<p>Potential questions regarding higher education during the pandemic and the future</p>
<p><i>Open question to potentially identify additional issues and 'new' crises.</i></p>	<p>What were the hottest debates about higher education in your country in the years before COVID-19 (2016-19)? Were these debates in the media and public, between university leaders and the government, and/or in the research community?</p>	<p>What is your general impression about how the pandemic's effects on higher education are discussed in universities? How did the government/ public authorities respond to the crisis (in the higher education sector)?</p>

		<p>What does the pandemic reveal about the national higher education system? What are your five major observations?</p>
	<p>What were the key priorities of your university before the pandemic?</p>	<p>How far did the pandemic change these priorities (or not)? Is there a focus on key priorities at the expense of other potentially important tasks?</p>
<p>1. European and national funding systems</p>	<p>What pre-existing conditions or trends concerning national funding systems were exacerbated during the pandemic? Did the pandemic present any new funding opportunities? Did changes in internationalisation play an important financial role?</p>	<p>What is your observation concerning current and future funding systems</p> <ul style="list-style-type: none"> • In your higher education institution • In your country • In Europe <p>Is there a (re)definition of research-funding priorities as a consequence of economic decline for the universities (e.g. competition)</p>
<p>2. Increasing gender imbalance and precariousness of the academic profession, across the life course</p>	<p>How has human resources management (precariat, gender inequalities, working conditions of working at home) been discussed in [country] before the pandemic? Did the pandemic increase gender imbalance in your university/country?</p>	<p>How far reaching are the effects of the pandemic on academic work and employment of early career and mid-career academics? Do you observe increasing precariousness of the academic profession across the life course?</p>
<p>3. (Inter)nationalisation</p>	<p>What is the relevance of internationalisation for universities, and how was this role interpreted in [country] before Corona?</p>	<p>What aspects of internationalisation are changing through the pandemic? Do you think these changes will last after the pandemic?</p>

		Do you observe tensions between national and international roles of higher education. For instance regarding international (im)mobility, national politics, potential strengthening of neo-nationalist politics.
4. Discrepancies between mass universities and smaller higher education institutions	Are there differences in the ways mass universities and smaller or research-based higher education institutions have responded to the pandemic with regard to the above issues?	
5. Increasing influence of digital governance perspectives	How did decision making take place in universities in [country] before the pandemic? What was characteristic for [country]	Did decision-making processes change with regard to transparency or collegiality in the wake of the pandemic? Is the digitalisation of decision-making processes a threat or opportunity? Will these changes stay in your opinion? What political and financial considerations went into procurement policies for teaching and researching online?
6. Changing national educational policy frameworks and the definition of governmental and institutional priorities	Are national educational policy frameworks and priorities changing during the pandemic, for instance, political decision-making, the advancement of specific research fields and subjects, or coping with new priorities? What new issues about the role or workings of higher education have emerged (e.g. sustainable development)?	
Additional questions we thought...	Could the pandemic be an opportunity to rethink higher education? Over-dependence on international students: is it an issue in your country / higher education institution?	

	<p>Efficiency and effectiveness → impact and benefit on society/region (e.g performance frameworks, renewed social contract)?</p> <p>Nation state solutions likely to dominate; re-nationalise solutions?</p> <p>How to deal with (potentially growing) discrepancies /inequalities between higher education institution and students?</p> <p>What is the future of transnational academic cooperation (such as the Bologna Process or the European Universities Alliances)</p>
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<p>Issue 2</p> <p><i>The purposes of higher education institutions in society – it refers to how society discusses the role of universities.</i></p>		
<p>Topics raised under this issue</p> <ol style="list-style-type: none"> 1. The role of knowledge and science (evidence-based decision-making, scientific research for the vaccine, ...) 2. The need for higher education to respond to different social demands, including potential changes in the labour market 3. Universities always have national and international priorities (which could collide). Has the pandemic reframed these priorities? 		
Potential questions on these topics	Potential questions regarding the pre-existing conditions	Potential questions regarding higher education during the pandemic and the future
<i>Open question to potentially identify additional topics and ‘new’ crises</i>	<p>How did the universities react/reposition themselves during the first wave / during the second wave?</p> <p>How did the university’s relations with the public, in the media and with the private sector change? How did the universities’ public responsibilities and relations with the private sector change?</p>	
<i>1. The role of knowledge and science</i>	<p>Do you think that the pandemic and the need for expert knowledge changes the role of universities and academics as experts in society and also the role of knowledge and science for society?</p>	
<i>2. The need for higher education to respond to different social demands, including the potential changes on the labour market</i>	<p>Has there been a social need for new kinds of education or to address new kinds of students during the pandemic?</p>	

	How far has employability and the demand of labour markets changed through Corona, and how is the role of universities discussed in public in relation to this?
3. Universities always have national and international priorities (which could collide). Is the pandemic reframing these priorities?	Universities always have national and international priorities. Did these priorities change, are there requests and how did your university react?

Issue 3		
<i>How higher education institutions see themselves – it refers to how higher education institutions see their own field, how the pandemic has affected the workings of the university, how it reacts, and how it changes through COVID-19.</i>		
Topics raised under this issue		
<ol style="list-style-type: none"> 1. Distance and online (doctoral, master) education, digitalisation as management strategies and the reconfiguration of academic work. 2. Data generated by using e-learning platforms - purposes, who owns the data and who has harvested it and how it will be used to transform higher education in the future? 3. University without walls versus a campus-based university 4. Institutional governance system (digital governance, autonomy, ...) 5. The role of university in caring for students (domestic and international students, staff) 6. Mobility in connection with internationalisation 7. Challenges of digitalisation for teaching and learning (e.g., impact on student-centred approaches) 		
Potential questions on these topics	Potential questions regarding the pre-existing conditions	Potential questions regarding higher education during the pandemic and the future
<i>Open question to potentially identify additional topics and 'new' crises</i>	<p>How does the pandemic affect your university? How does the university react to the new situation more generally? How do you think it will change through COVID-19? How did the university react to the pandemic? Which people or organs were key players in developing these</p>	

	<p>reactions? Will these changes become permanent and what further changes you will anticipate?</p> <p>What did the pandemic reveal about your higher education institution (strengths / weaknesses...)?</p> <p>What changes could become permanent/or would be installed permanently after the crisis in your opinion? What further changes will you anticipate?</p>	
Potential questions on these topics	Potential questions regarding the pre-existing conditions	Potential questions regarding higher education during the pandemic and the future
<i>1.Distance and online (doctoral, master) education, digitalisation as a management strategy and the reconfiguration of academic work</i>	<p>To what extent was digital teaching already diffused in your university before the pandemic?</p> <p>What was the role of teachers in higher education in [country] (e.g., knowledge providers, innovators, nurturing students, preparing students for the labour market)?</p>	<p>What role did distance and online teaching play during the pandemic?</p> <p>How did that change the teachers' role and identity?</p> <p>How did your university manage these challenges?</p> <p>What long-term effects on the teaching at universities do you expect?</p>
<i>2. Data generated by the use of zoom and other platforms</i>	<p><i>How was the online platform's choice explained (security? Cost? Accessibility Quality? Ownership of data? Other) When was it implemented? Was it debated? tested? What alternative solutions were taken into account?</i></p> <p>The use of zoom and other online platforms generates large amounts of data and raises data security issues. Did that play a role in your university – how has it been discussed?</p> <p>Who owns the data and who has harvested it and how will it be used to transform higher education in the future?</p> <p>How has your university dealt with this issue?</p> <p>How has control and security been discussed?</p>	
<i>3.University without walls versus a campus based university</i>	<p>Has your university been discussing operating with fewer walls? (e.g., teaching online around the world) versus the importance of campus-based academic social life.</p> <p>On this topic do you think that there are differences with regard to the type and size of the university?</p>	

	<p>Can you imagine a university without a brick-and-mortar building?</p> <p>Has your university discussed this question?</p> <p>How could the changing teaching and learning modes and the increase in digitalisation, affect the university as an organisation - including its human and material resources?</p> <p>Do you expect long-term effects?</p>	
Potential questions on these topics	Potential questions regarding the pre-existing conditions	Potential questions regarding higher education during the pandemic and the future
4. Institutional governance system	<p>Have you observed changes in your institution's governance and what do you expect in the future?</p> <p>Which new forms of university governance did you observe during the pandemic?</p> <p>What do you think is the impact of these governance forms on academic autonomy and values?</p>	
5. The role of the university in caring for students and staff (domestic and international)	<p>How did the university care for its academic and administrative staff and for its students' health, welfare and living conditions during the pandemic?</p>	
6. Mobility in connection with internationalisation	<p>International cooperation can be considered as a general value of academic culture. How has this culture been lived at your university before the pandemic and how has internationalisation been discussed in your country?</p>	<p>To what extent did the pandemic reduce mobility (of students, academics?) (with short-term or long-term consequences)?</p> <p>How were international students included in the academic and social life of the university during the pandemic?</p> <p>Did the concepts about establishing international cooperation change?</p> <p>Which long term effects do you expect?</p>
7. Challenges of digitalisation for teaching and learning (e.g., impact	<p>What are the consequences of the new teaching methods?</p> <p>For the role of teachers</p> <p>Digitalisation brings new formats and ways of teaching and learning (e.g. online forms, loss of personal face-to-face</p>	

<p><i>on student-centred approaches)</i></p>	<p>contact points, difficulties of right in time involvement etc.).</p> <p>How are these changes impacting teachers' role in your institution (e.g. knowledge transfer, skill development, nurturing students, providing instant feedback, involving those interested, building motivation, transferring the importance of knowledge, research, ethics, etc.)? And how do they affect the role of students at your university (e.g. their motivation, involvement and responsibility)?</p> <p>For the students</p> <p>What was the proportion of students who were digitally excluded? (Having bad access to digital teaching, a shared computer, no quiet place at home...)</p> <p>For academics</p> <p>How about the working conditions to balance teaching, research, service and administrative workload?</p>
<p>Additional questions stemming from the previous discussion</p>	<p>What were the hot issues being debated in the institution pre COVID-19? Did the debate change during the pandemic? What new issues emerged?</p> <p>How would you describe your higher education institution's students' social background (upper middle / lower middle?)</p> <p>How would you define your higher education institution? Mass? Niche? Elite? Research-oriented? Teaching oriented?</p> <p>What is specific to disciplinary areas?</p> <p>How is a safe campus (after the pandemic) taking into account inclusion/exclusion issues of disadvantaged groups?</p> <p>How are any power struggles in the governance of higher education institutions supporting/hampering the resistance to change?</p> <p>How has governance and university decision making changed during COVID-19 (is it more top-down?). This point is located in one of the general questions, but could it be a separate theme</p> <p>Is there something about your institution's flexibility that affects its ability to respond?</p>

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31. Repositioning China in the Global Education Hierarchy: Sino-Foreign Educational Partnerships in the Belt and Road Initiative. Jie Gao, March 2020
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