# The impact of COVID-19 on higher education: a review of emerging evidence

*Analytical report*

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# The impact of COVID-19 on higher education: a review of emerging evidence

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# Executive summary

The COVID-19 pandemic has resulted in temporary physical closures of schools and higher education institutions around the world. In higher education, approximately 220 million students globally have been affected due to the disruption caused by COVID-19, leaving policymakers and educational institutions with unprecedented challenges such as how to mitigate learning losses, how to deploy remote learning, how to safely reopen educational institutions and how to ensure that underrepresented, vulnerable and disadvantaged learners are not left behind.

The COVID-19 pandemic has already had an unprecedented impact on higher education worldwide in virtually all aspects of its functioning. In the academic year 2019/2020, the pandemic transformed the way teaching took place, accelerating transformation that was already taking place in the form of online learning and teaching. The pandemic has also had direct impact on how research is carried out, on university operations (in terms of campus closures and the shift to online learning) and on university governance, with management staff needing to take a range of emergency decisions and allow additional flexibility in many areas of activity. The pandemic has also highlighted the importance of universities' community engagement.

This analytical report provides a synthesis of the emerging evidence on what impact COVID-19 has had on higher education in Europe, with a special focus on three thematic areas: teaching and learning; the social dimension of higher education (i.e. the effect on underrepresented, vulnerable and disadvantaged learners); and student mobility. Drawing upon 14 rapid-response surveys carried out in 2020 by university networks, student organisations and researchers, as well as over 50 journal articles, reports and publications, the analytical report synthesises emerging evidence into three levels of impact of COVID-19:

- **immediate impact** (how the pandemic affected institutions and learners in the 2019/2020 academic year)

- **short-term impact** (how the pandemic is affecting or is likely to affect the current 2020/2021 academic year)

- **medium-term impact** (how the effects of the pandemic are likely to affect higher education systems, institutions and students by 2025).

At the end of each thematic section, **policy implications and policy recommendations** are included, listing actions to be taken at the level of higher education systems (by transnational, national or regional authorities) and actions to be taken at the level of higher education institutions (by university leaders, teaching staff and student support services).

## 1. Impact of COVID-19 on teaching and learning

The **immediate and short-term impact** of COVID-19 on teaching and learning can be assessed based on the survey findings from three distinct perspectives:

- From the higher education institution perspective, the survey findings indicate that the sudden move to 'emergency remote teaching' was made by virtually all surveyed higher education institutions, and that the transition online was considered successful by university leaders. Most higher education institutions provided some sort of support to the teaching and learning process in the form of training and technical support. However, some universities have faced problems with their capacity for delivering online classes in terms of technology and tools.

- From the teaching staff perspective, the survey findings indicate that teaching staff managed to successfully adapt their teaching material developed for on-site teaching to online formats. However, it is important to note the distinction between the resulting 'emergency remote teaching' and 'online learning' – namely, emergency remote teaching involves transforming on-site classes to a virtual mode, without making changes to the curriculum or the methodology. The main form of teaching during the pandemic at European universities was via live-streamed lectures in real time (74.6 %), presentations sent to students (44.5 %) and asynchronous pre-recorded lectures available online via video (32.1 %) or audio (20.6 %). The survey findings also note that the switch to emergency remote teaching was more difficult in the fields which have a practical component (clinical medicine, veterinary studies, the arts etc.).

- From the student perspective, although the delivery of emergency remote teaching was evaluated positively by students overall, the survey results show that a significant proportion of students encountered serious challenges in their learning. Almost half of all students believed that their academic performance changed for the worse since on-site classes were cancelled and more than half of the students surveyed reported having a larger workload since the transition to online teaching. Access to online communication tools and the internet remains a challenge for some students, as does their level of digital skills. Finally, the experience of studying during the COVID-19 pandemic also resulted in new challenges to students psychological and emotional well-being, with students often faced with negative emotions such as boredom, anxiety, frustration and anger. Further analysis of this challenge is explored in the following section on the social dimension of higher education.

The potential **medium-term** risks to teaching and learning (until 2025) are both numerous and significant. If one of the impacts of the pandemic is a permanent movement of more study programmes to online/remote platforms, then the areas that will need to be urgently addressed will include:

- supporting teaching staff in adapting their curriculum and methods to online teaching;

- ensuring the well-being of teaching staff and administrative staff in such turbulent changes;

- supporting students in being better prepared for online learning;

- avoiding the risk of disengagement and drop-out of students who face difficulties in the online environment;

- adapting assessment processes to safeguard quality standards and academic integrity in the context of online learning;

- adapting quality assurance regulations for a more flexible approach to address the online and blended delivery of study programmes;

- addressing potential negative consequences on the recognition of qualifications on the labour market due to the lack of confidence in online learning.

Despite the many risks facing higher education in the medium and long term due to COVID-19, many reports and expert opinions focus on how this also represents an opportunity to rethink and reconceptualise the nature and methods of teaching and learning in higher education.

Based on the reviewed literature, a table of **policy recommendations** for teaching and learning was developed, a summary of which is presented below:

| Level of intervention | Policy recommendation | Source |
|---|---|---|
| **SYSTEM LEVEL** | | |
| **Strategy** | Apply the lessons learnt during the pandemic to reimagining post-COVID higher education. | UNESCO IESALC (2020) |
| | Include higher education in the stimulus plans for economic and social recovery. | |
| | Forge national consensus for a strategy for fostering recovery and innovation in higher education. | |
| **Funding** | Support and provide the means for higher education institutions to enhance their online teaching potential. | Doolan et al., 2020 |
| | Invest in online infrastructure (broadband, system-level support services for higher education, funding schemes etc.). | Authors |
| **Coordination** | Define new regulations on quality assurance and qualification recognition in the context of remote learning, including provisions for safeguarding academic integrity. | Authors (based on QAA, 2020) |
| | Provide guidance for online platforms, online proctoring, data protection and teaching. | |
| **Research** | Conduct research on the consequences of disruption in teaching and learning caused by the COVID-19 pandemic. | Authors |
| | Share information gathered through research and make recommendations for institutions and public policy. | Authors |
| **HIGHER EDUCATION INSTITUTION LEVEL** | | |
| **University management** | Apply the lessons learnt during the pandemic to the development of new teaching and learning models (face-to-face vs online and/or hybrid, rethinking physical spaces). | Authors |
| | Make long-term online learning strategies. | Authors |
| | Rethink the one-person teaching model and design a transition towards a teamwork teaching model (teaching staff supported by multidisciplinary teams). | Authors |
| | Create protocols for protecting academic integrity, i.e. for combating fraud and online cheating. | Authors (based on QAA, 2020) |
| | Address data protection concerns (e.g. by creating security protocols). | Authors |
| | Invest in university's online infrastructure. | Authors |
| | Invest in effective online learning tools and platforms. | Gatti et al. (2020), World Bank (2020a) |

| | Provide extensive structured professional training for academic and administrative staff in online and hybrid teaching. | ESU (Doolan et al., 2020) |
|---|---|---|
| | Adapt quality assurance mechanisms. | Gatti et al. (2020), World Bank (2020a) |
| | Identify at-risk students to minimise inequalities. | World Bank (2020a); UNESCO IESALC (2020) |
| **Support services** | Train the teaching staff for online teaching. | Gatti et al., 2020; World Bank (2020a) |
| | Organise multidisciplinary teams comprised of pedagogical and technological experts to provide support to the teaching staff for preparing and implementing online teaching. | Authors |
| | Develop students' digital competencies for online learning. | Gatti et al. (2020); World Bank (2020a) |
| | Provide accessible and user-friendly counselling and guidance for students so as to find suitable solutions for academic, health, and career challenges. | Doolan et al. (2020) |
| | Provide interactive support to teachers and students. | Gatti et al., 2020; World Bank (2020a) |
| **Teaching and learning** | Create easily accessible online teaching and study materials. | Authors |
| | Adapt assessment and grading to online teaching and learning. | Gatti et al., 2020; World Bank,2020a |
| | Use one platform to access all resources. | Gatti et al., 2020; World Bank (2020a) |
| | Document the changes in teaching and learning models and their impact. | Gatti et al., 2020 |
| | Evaluate and redesign teaching methods to respond to the requirements of the online teaching and learning environment. | World Bank (2020a) |

## 2. Impact of COVID-19 on the social dimension of higher education

According to the ministerial communiqués of the European Higher Education Areas (EHEA), the 'social dimension' encompasses the creation of an inclusive environment in higher education that fosters equity and diversity and is responsive to the needs of local communities. Therefore, the social dimension refers to ensuring equity of access, participation and completion of higher education, with a special focus on students from underrepresented, disadvantaged and vulnerable groups.

The **immediate- and short-term impact** of COVID-19 on the social dimension of higher education (in the academic years 2019/2020 and 2020/2021) has been the emergence of new challenges that risk negatively affecting students' access, study progress and retention. A survey of students in the EHEA organised by the European Students' Union identified the challenges faced by students:

- challenges related to studying conditions (access to a quiet place to study, access to equipment and to a reliable internet connection, access to course study materials and confidence in using online platforms);
- challenges related to funding (loss of employment/income, difficulties in meeting living costs, issues with receiving scholarships);
- and challenges related to well-being (lack of supportive social networks; prominent feelings of frustration, anxiety and boredom with academic activities).

The survey's analysis confirmed that students faced with many of these challenges consistently encountered more problems in accessing higher education during the COVID-19 pandemic, adjusting to studying, and reported a greater perceived drop in academic performance.

National-level surveys and data back up these trends. Data from the United Kingdom indicated that students who felt more lonely/isolated and who were less satisfied with the academic environment and with their social life were at a much greater risk of dropping-out of higher education. Data from surveys in the USA indicated that lower-income students, racial minorities and first-generation students experienced larger negative impacts on academic outcomes compared to their peers and that groups more likely to be affected by mental health problems were low-income and working-class students, LGBT students and students who are caregivers (to children or other adults).

In the **medium term** (up to 2025), there is cause for great concern on inequalities in access and participation in higher education. Namely, existing data and projections anticipate that the COVID-19 pandemic will result in a significant deterioration in educational inequality in pre-tertiary education. Namely, the switch to online learning is likely to exacerbate existing educational inequalities due to lack of access to learning resources, lack of a suitable home learning environment and insufficient support from parents – resulting both in learning losses and in disengagement from education. This in turn will result in lowering access and participation of underrepresented, disadvantaged and vulnerable groups in higher education.

Despite the serious risks facing the social dimension of higher education, COVID-19 provides an opportunity to directly address this challenge and place the inclusion of underrepresented, vulnerable and disadvantage groups as a top priority in the efforts to address the disruption caused by COVID-19. This would therefore contribute to the new goal of creating socially inclusive higher education in Europe in the upcoming decade as defined in the European Commission's communication *Achieving the European Education Area by 2025* and in the 2020 Rome Ministerial Communique. A summary of the **policy recommendations** to achieve this objective is presented below:

| Level of intervention | Policy recommendation | Source |
|---|---|---|
| **SYSTEM LEVEL** | | |
| **Strategy and planning** | Create strategies and action plans to mitigate negative consequences caused by the COVID-19 pandemic in higher education (HE), with special focus on strengthening the social dimension of HE. | World Bank, 2020 |

| | Legal regulations and administrative rules should allow sufficient flexibility for higher education institutions (HEI) to create appropriate solutions to cope with COVID-19 circumstances. | Rome Communique, 2020 |
|---|---|---|
| | Collect, process, and use data that will help understand the impact of the COVID-19 pandemic on the social dimension of HE. | Authors (see the chapter on long-term impact above) |
| **Supporting measures** | Address structural issues of the digital divide between countries and within countries (bandwidth, server hosting/data storage). | World Bank, 2020 |
| | Secure access to reliable, adequate and affordable internet connection for all students. | Authors |
| | Support professional training for academic and administrative staff at HEIs on how to replace on-site teaching with online delivery: Create cooperative national structures, facilitate peerlearning and inter-institutional staff development. | Doolan et al., 2020; Authors |
| | Provide additional financial support for HEIs and students to mitigate negative consequences caused by the COVID-19 pandemic. | Doolan et al., 2020; Montacute and Holt-White, 2020 |
| **HIGHER EDUCATION INSTITUTION LEVEL** | | |
| **University management** | Create institutional strategies and action plans to mitigate negative consequences of the COVID-19 pandemic, with special focus on strengthening the social dimension of HE. | Authors |
| | Increase flexibility of university policies in the design, organisation and delivery of study programmes (e.g. allowing students to easily adjust their course load, timing of assignments), in alternative access routes, etc. | Aucejo et al., 2020 |
| | Increase flexibility of HEI's financial policies, e.g. allowing students to defer tuition payments if they are unable to pay due to the COVID-19 pandemic, or cancelling tuition fees for students who can demonstrate to be negatively affected by the pandemic. | Aucejo et al., 2020; Authors |
| | Allocate more resources, reduce barriers, and increase communications for a potential increase in students' requests for mental health services, including counselling or therapeutic services, in the 2020/2021 academic year. | Chirikov et al., (2020) |
| | Provide additional university-level financial support for at-risk students to access equipment, Internet services, and to improve their digital skills. | Doolan et al., 2020<br><br>Montacute and Holt-White, 2020 |
| | Assess adequacy of provision of financial and material support for at-risk students and institutions. | World Bank, 2020 |
| | Survey students on their capacity to engage in remote learning (equipment, family responsibilities, home environment, etc.) and | World Bank, 2020 |

| | | |
|---|---|---|
| | on student welfare, and make adaptations to address emerging needs. | |
| **Support services** | Ensure accessible and user-friendly counselling and guidance for students and staff to find appropriate solutions for academic, health, and career challenges caused by the COVID-19 pandemic. | Authors, based on Doolan et al., 2020 and Wonkhe, 2020 |
| | Develop and implement programmes to keep at-risk students engaged, including dedicated tutors, point persons, and customised work programmes or schedules. | World Bank, 2020 |
| | Facilitate the development of peer-based social support networks among students and staff, particularly helping the underrepresented, disadvantaged, and vulnerable. | Authors, based on Doolan et al., 2020 and Wonkhe, 2020 |
| | Provide appropriate training to all students and to teaching and administrative staff to build digital competencies which allow them to study and work in an online environment and to better understand social dimension principles. | World Bank, 2020; Authors |
| | Work alongside student organisations to develop interventions, create proactive programmes, and expand existing services for student welfare. | Chirikov et al., 2020 |
| **Teaching and learning** | Provide students with a more flexible assignment schedule to allow them to adapt to changes in their work schedule or family commitments due to the COVID-19 pandemic. | Aucejo et al., 2020 |
| | Recognise the risks of lower engagement or achievement among students with mental health challenges. | Chirikov et al., 2020 |
| | Allow underrepresented, disadvantaged, and vulnerable students to switch between online and in-person classes to adapt to their specific housing, work, and health situation. | Aucejo et al., 2020 |

## 3. Impact of COVID-19 on international student mobility

The **immediate impact** of COVID-19 on international student mobility in the 2019/2020 academic year has been immense since the pandemic effectively brought international travel to a stop. COVID-19 has resulted in cancellations and delays to numerous mobility schemes, although most universities (85 %) offered alternative arrangements in the form of 'virtual mobility' via emergency remote teaching.

Internationally mobile students were faced with a range of challenges in the 2019/2020 academic year: students who were unable to return to their home countries often had to find alternative accommodation arrangements (due to campus closures) and are likely to have been at a higher risk of isolation during the periods of lockdown; students who succeeded in returning to their home countries may have experienced challenges due to large time zone differences, inadequate internet access and due to the overall disadvantages of studying with much lower interaction with peers, thus removing a key element of learning mobility. Mobile students from third countries (countries that are not members of the EU or other countries/territories whose citizens enjoy the right to free movement) faced particular challenges. These challenges included delays in their applications for visas or residence permits due to the risk of existing permits not being granted or being withdrawn and due to obstacles to working part-time while studying (in turn presenting financial difficulties). While international students in Europe (including both

EU nationals and non-EU-nationals) were broadly satisfied with the support they received from their institutions during the COVID-19 pandemic, certain gaps were identified: between and third and a quarter of international students were not satisfied with the quality of communication from their institutions during the pandemic.

The **short-term impact** of COVID-19 on student mobility (in the 2020/2021 academic year) has been that universities have faced great uncertainty about their international student enrolment policies, and most have forecasted a major decrease of international student enrolment. As can be expected, most universities also anticipated that any student mobility would need to be in the form of either fully online learning or hybrid/blended approaches combining online and on-site classes. The latest emerging data at the time of writing this report suggested that the anticipated decreases in international student enrolments were confirmed in practice in many countries worldwide at the start of the 2020/2021 academic year. The number of international students dropped by 20 % in Germany and by 16 % in the USA (with the drop in new student enrolments at 43 %), while in Australia applications for student visas dropped by 80–90 %.

In the **medium term** (until 2025), there is even greater uncertainty and concern about the range of possible impacts of COVID-19 on international student mobility. If universities are forced to limit international student mobility and offer virtual (or at least blended) alternatives, the key question will be how can universities ensure added-value for international students and compensate for the loss of physical interaction in the host country. From the student perspective, it is uncertain whether such forms of study programmes and degrees will be perceived as having the same market value and whether students will be ready to pay the same level of tuition fees for such a degree. If international student mobility does not return to pre-COVID levels, the financial impact on universities and higher education systems in countries with the most international students at the global level and that also charge significant tuition fees (e.g. the US, the UK, Australia, New Zealand among others) could be severe. Finally, there is a broader risk that the COVID-19 pandemic will have detrimental effects on other aspects of internationalisation, such as cross-border research and cross-border collaborations between universities, as well as on 'campus internationalisation', that is, ensuring a culturally diverse environment at the university.

Without addressing the immense challenges COVID-19 will have on international student mobility in the long term, the identified challenges in the short term and medium term raise a number of policy implications. Responses to many of those challenges can be provided both at the higher education system level and at the level of individual higher education institutions. Based on the reviewed evidence, the policy recommendations are summarised in the table below:

| Level of intervention | Policy recommendation | Source |
|---|---|---|
| **SYSTEM LEVEL** | | |
| **Strategy and planning** | Redefine goals for a paradigm shift: use technology to blend physical and virtual learning mobility, focusing more on idea exchange and learning objectives. | Hudzik, 2020 |
| | Re-assess whether more flexibility can be provided for visa and residence permit regulations for third country students enrolling in virtual mobility. | Authors, based on EMN–OECD, 2020 |

| Funding | Stimulate transnational and cross-sectoral collaboration between universities, national authorities and student and youth organisations in order to overcome the impacts of the crisis. | Gabriels and Benke-Aberg, 2020 |
|---|---|---|
| | Funds originally intended for physical mobility could be redirected to other uses, such as the development of 'internationalisation at home' strategies and initiatives within and across institutions and cooperation projects of all kinds to help quality implementation of online teaching & learning, assessment and their quality assurance.<br><br>Funding could be made available for the technological equipment needed to maintain strong reliable platforms for online teaching and learning. | Gatti et al., 2020 |
| | Assess the financial losses of higher education institutions due to loss of tuition fee income from international students (both from within the EU and from third countries) and consider the impact this may have on the financial stability of higher education institutions. | Authors |
| **HIGHER EDUCATION INSTITUTION LEVEL** | | |
| **University management** | Put in place support structures to allow for impact assessment and to support the recovery of international student mobility. | Gabriels and Benke-Aberg, 2020 |
| | Ensure each measure taken by the institution is looked at through the lens of equity and diversity, to ensure solutions for students from less advantaged backgrounds in the emergency response offered. | Gabriels and Benke-Aberg, 2020 |
| | Adopt alternatives strategies for "internationalisation at home" (enriching on-campus learning by blending in cross-cultural elements in the home institution). | World Bank 2020,<br><br>Gatti et al., 2020; Hudzik, 2020 |
| | Rethink traditional programme models in international mobility, such as learning in semester-length segments and consider developing modular learning building blocks. | Hudzik, 2020 |
| **Support services** | Ensure reliable and specific information that targets international student populations, in English or a language accessible to the international student population. | Gabriels and Benke-Aberg, 2020,<br><br>ACHA, 2020 |
| | Ensure that the student support available for domestic students (psychological support, logistical support, medical support, etc.) is also available for international students. | Gabriels and Benke-Aberg, 2020 |
| | Provide counselling and support for mental health and emotional support services that are available both on-campus and online. | ACHA, 2020 |
| | Ensure that specific information about accommodation is available, including about students' rights when a mobility period is interrupted. | Gabriels and Benke-Aberg, 2020 |
| | Identify individuals on-campus who can serve as a resource for international students and assist with financial aid, health insurance, visas, student services, and tech support. | ACHA, 2020 |

| | Reduce stigma of seeking mental health care by sharing resources via the campus website and at orientation and through student groups. | ACHA, 2020 |
|---|---|---|
| | Provide opportunities for international students to meet counselling and health service staff and health coaching staff.<br><br>Offer peer or professional counselling support groups for international students. | ACHA, 2020 |
| | Ensure counselling and medical staff are trained to provide culturally competent care and services. | ACHA, 2020 |
| **Teaching and learning** | Ensure equal access to online learning tools for students, be mindful of the diversity in student populations. | Gabriels and Benke-Aberg, 2020 |
| | Develop asynchronous lectures to provide maximum time zone flexibility. | ACHA, 2020 |
| | Consider incorporating internationalisation into the curriculum as a part of 'internationalisation at home'. | Hudzik, 2020 |

## 4. Peer learning: the potential of transnational deeper cooperation

In addition to identifying the above trends, the report also presented 10 different examples of good practices in addressing different aspects of the COVID-19 pandemic. The good practices, which featured examples from 11 different countries as well as transnational responses, included the following types of interventions

- System-level responses by governments to provide guidance for universities, additional financial support to students, flexibility in visa/residency procedures and targeted funding to support innovation in teaching methods.

- Institutional-level responses by higher education institutions to support underrepresented, disadvantaged and vulnerable students (in terms of equipment, financial support and psychological support) and to support international students.

- Network-level responses to share online platforms and learning resources and to brainstorm solutions to joint challenges.

The featured good practices demonstrate that the COVID-19 crisis has resulted in a range of rapid, proactive and creative interventions to address pressing needs. The featured practices also aim to underline the fact that institutions can learn from the experience of others' in addressing crises such as COVID-19, underlining the importance of a network-approach to sharing good practices and peer learning as a highly efficient way of sharing resources and technological platforms and generating new ideas. In particular, being part of a deep academic collaboration alliance, such as the European Universities Initiative, can help institutions to better cope with the challenges of the crisis and to implement post-COVID higher education. It could even help accelerate transformational processes such as deepening institutional cooperation, establishing European inter-university campuses and intensify physical and virtual mobility by setting up blended mobility for students and staff.

## 5. Concluding reflections

Based on the review of the emerging evidence, even the assessment of the short- and medium-term impact of COVID-19 on higher education remains incomplete. More research will be required to assess the impact of learning losses, the financial impact and the impact

on educational inequalities. The long-term impact is therefore even more difficult to predict, especially since it still unknown how long the COVID-19 pandemic will continue to affect our societies in the way it has during 2020.

A concern expressed in many of the surveys and opinions reviewed in this report is that there is a risk that COVID-19 could result in devastating consequences for higher education worldwide, including: major financial cuts from the public sector, major tuition fee losses, potential closures of certain higher education institutions, and negative outcomes for underrepresented, vulnerable and disadvantaged groups (decreased access and increased drop-out). At the same time, the COVID-19 pandemic has provided an opportunity to reflect critically on how higher education is organised and delivered, and to prepare creative solutions and alternative possibilities for future directions in higher education. Among the prominent perspectives presented in this report are: the opportunity to accelerate higher education transformation and improve the learning process by adopting innovative approaches to organising online learning; the opportunity to adopt creative approaches to internationalisation (virtual mobility and 'internationalisation at home') and the opportunity to genuinely place the social dimension of higher education as a high-level priority in European higher education systems.

It may still take months or even years to determine the full impact of the COVID-19 pandemic on our societies as a whole, and on higher education in particular. There are also numerous other aspects of higher education that need to be considered in such a process that were not covered in this report. For example: what the impact of COVID-19 will be on university research (in terms of accessibility of research infrastructures, sustainability of international research collaborations and ability to carry out fieldwork); what the impact will be on university engagement with external partners (businesses, public authorities and civil society) and on universities' broader societal impact; and what the impact will be the levels of public funding of higher education in Europe. It is therefore crucial to continue to analyse these developments in the coming academic year through further surveys and research.

Higher education will not be able to address the range of challenges highlighted in this report, nor will it be able to become a driver of the solutions and innovations in the post-COVID recovery period, without substantial support from public authorities. As emphasised by UNESCO IEASLC (2020), the post-crisis context will require governments to take measures to revive the economy, and higher education 'must be seen as a tool in a context of economic recovery and, as such, must be an integral part of the stimulus programmes that are designed' (p. 38). We hope that the present report will provide an initial input to inform this process, by aiding policymakers, as well as higher education institutions, students and other stakeholders at the European, national and local levels to better understand the emerging trends and challenges, and to identify policy responses to address those challenges.

# 1. Background: COVID-19 and higher education

The COVID-19 pandemic has already had a devastating impact on societies around the globe, including on public health, food systems and the world of work (ILO, FAO, IFAD and WHO, 2020). The pandemic is also likely to result in increased poverty and inequalities (UN, 2020a).

In the field of education, COVID-19[1] has resulted in continuing periods of temporary physical closure of schools and higher education institutions, affecting 1.5 billion learners around the world and leaving policymakers and educational institutions with unprecedented challenges such as how to mitigate learning losses, how to deploy remote learning and how to safely reopen schools and universities (UNESCO, UNICEF and World Bank, 2020).

## The range of impacts of COVID-19 on higher education

Approximately 220 million students globally have been affected due to the disruption caused by COVID-19 (World Bank, 2020a). The immediate challenges faced by higher education institutions have been identical to those faced in pre-tertiary education: temporary closures of institutions; a move to 'emergency remote teaching'; a complex planning process to safely resume operations in new conditions; and ensuring that disadvantaged learners are not left behind.

Beyond such immediate impacts, the questions regarding how the COVID-19 will affect higher education, both in the short and the long term, are innumerable and complex. Such questions cover virtually every aspect of higher education institutions, and include the following:

1. **Teaching and learning**: will COVID-19 result in online learning becoming a permanent feature of study programmes? If so, how will this affect universities (in terms of logistical or technical capacities), staff (in terms of pedagogical training and support) and students (in terms of student recruitment and retention, achievement of learning outcomes and employability)?

2. **Research**: how will COVID-19 affect the accessibility of research infrastructures, the process of data collection and international research collaborations?

3. **Third mission/community engagement**: how will COVID-19 affect university partnerships with external communities (from governments and businesses to civil society organisations) and how will it affect universities' role in responding to societal needs?

4. **Social dimension of higher education**: how to prevent COVID-19 resulting in a severe deterioration in reduced access, learning losses and drop-out for students from underrepresented, disadvantaged and vulnerable groups?

5. **Internationalisation/mobility**: how will COVID-19 affect the future of internationalisation of higher education due to the unprecedented disruption of international student mobility due to travel restrictions and due to student health and safety concerns?

6. **University governance and management**: how can university management support staff and students in dramatically different working conditions, including

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[1] Hereafter, the term 'COVID-19' will be used as an abbreviation to refer to the COVID-19 *pandemic*, and not to the COVID-19 disease itself; alternatively, reference will be made to 'the pandemic'.

through adequate digital infrastructure, flexibility of procedures, closer communication and improved support services?

7. **Financial impact:** how will COVID-19 affect the financial sustainability of higher education programmes or entire institutions (through drops in either public funding and/or tuition fee funding)?

At the level of higher education systems, a range of additional questions arise regarding how to ensure the framework conditions to ensure the quality, relevance and sustainability of higher education systems in the aftermath of COVID-19. Policymakers will need to adopt strategic approaches to minimise the disruption of COVID-19 on the higher education system. At the same time, policymakers will be faced with the challenge of how to ensure a level of public funding for the higher education system to meet (both existing and newly-arising) needs of universities and students due to COVID-19 in a context of severe pressure on national budgets.

Higher education institutions play a key role in addressing pressing societal needs of their surrounding communities through all their activities, from teaching and research to knowledge exchange and student activities (Farnell, 2020). Higher education is also expected to play a key role in contributing to the achievement of the sustainable development goals (SDGs) described in the UN 2030 Agenda (GUNI, 2019). According to the European Commission's communication *Achieving the European Education Area by 2025*, higher education institutions should be:

> 'central actors of the "knowledge square": education, research, innovation and service to society, playing a key role in driving the COVID-19 recovery and sustainable development in Europe while helping education, research and the labour market to benefit from talent flows.' (European Commission, 2020, p. 10-11).

Ensuring that higher education institutions have the support and resources to drive the solutions and innovations that will be needed to the new challenges our societies will face in the post-COVID recovery period is more important than ever. The basis for this is to analyse the emerging evidence of the impact of COVID-19 on higher education and to identify possible policy responses to the identified challenges.

## Thematic focus and structure of the report

Since the outbreak of the COVID-19 pandemic, there has been a surge in the number of studies and analyses by stakeholders in higher education (policymakers, higher education institutions, transnational organisations, networks and individual researchers) to try and better understand the impact of COVID-19 on higher education and how to respond to it. Initiatives have included rapid-response surveys of institutions, analyses of international organisations, and research on student experiences, as well as expert opinions and media articles. This analytical report has identified a total of 73 publications covering the impact of COVID-19 on higher education. The objective of this report is to synthesise the findings of the emerging international literature and to analyse emerging trends and possible policy responses.

Based on a request from the European Commission (DG Education, Youth, Sport and Culture), this analytical report focuses on specific aspects of the emerging evidence:

- The report focuses on three thematic priority areas: **teaching and learning; the social dimension of higher education; and student mobility**. This means that the report does not focus on some of the other important aspects of how COVID-19 affects higher education, as described above. Additional studies would be needed to assess the broader impacts on higher education as a whole.

- For each thematic section, the report synthesises emerging evidence from surveys and research into three levels of impacts of COVID-19: **immediate impact** (how

the pandemic affected institutions and learners in the 2019/2020 academic year); **short-term impact** (how the pandemic is affecting or is likely to affect the current 2020/2021 academic year); and **medium-term impact** (how the effects of the pandemic are likely to affect higher education systems, institutions and students by 2025). Although some long-term impacts are occasionally referred to in the report, these are not considered in detail, since the literature reviewed has not focused on forward looking scenarios.

- The **policy implications of the findings and resulting policy recommendations** are then provided in each thematic section, either as statements articulated by institutions and researchers in their survey reports/articles, or as statements formulated by the authors of this report based on their interpretations of the emerging evidence. In order to be fit for purpose, the policy recommendations are structured into the following categories:

| System level | Actions that need to be taken at the level of higher education systems (by transnational, national or regional authorities), including policies, guidelines and funding. |
|---|---|
| **Higher education institution level** | *University management:* Actions that need to be taken by university management staff at the level of individual higher education institutions.<br><br>*Teaching and learning:* Actions that need to be taken at the level of academic units and/or by teaching staff members at individual universities.<br><br>*Support services:* Actions that need to be taken by student support services at individual universities. |

The focus of the analytical report is on the implications of COVID-19 for the European (Higher) Education Area. As can be expected, however, many of the emerging trends and possible policy responses to COVID-19 in the area of higher education are common at the global level. For this reason, the report draws equally on publications from Europe and other continents (including Australasia, North America and Latin America) in reaching conclusions regarding trends and policy responses, while being careful to consider context-specific differences.

## Emerging evidence: overview of recent surveys and research

### *Surveys on the impact of COVID-19 on higher education*

The early surveys, conducted at the very beginning of the COVID-19 crisis, were mainly focused on the HEIs' immediate response to the pandemic outbreak, i.e. they were aiming to establish whether campuses were closed, and classes cancelled, and to what extent, or moved online, and to what extent. Therefore, such surveys do not provide more than a snapshot, i.e. a one-dimensional, limited insight into the impact COVID-19 has had on higher education. Later surveys aimed to find out more about the impact of COVID-19 on higher education stakeholders, such as higher education institutions, teaching staff, various student groups and their perception of the new reality, but also on the teaching and learning process (in terms of pedagogy and technology), on mobility and student recruitment.

Table 1 provides an overview of surveys carried out by international university networks and student unions, providing the details which indicate their relevance: the period when the survey was conducted, the number of respondents and the region(s) covered (global,

European or national). The surveys are presented in chronological order. They all relate to the first wave of COVID-19 in 2020.

*Table 1 - An overview of surveys carried out by national and international stakeholders in higher education and researchers*

| Period when the survey was conducted | Institution /Author | Thematic focus of survey | Number of respondents | Region |
|---|---|---|---|---|
| 01-26.02.2020 | Institute for International Education IIE (Martel, 2020a) | *Student mobility* | 234 HEIs | National: USA - 43 states |
| 19.02–06.03.2020 | European Association for International Education - EAIE (Rumbley, 2020) | *Student mobility* | 805 HEIs | Europe: 38 countries |
| 03.2020 | Inside Higher Ed (2020) | *Cross-cutting* | 172 HEIs | National: USA |
| 19-30.03.2020 | Erasmus Student Network – ESN (Gabriels and Benke-Aberg, 2020) | *Student mobility* | 21 930 students | Europe: 42 Erasmus countries |
| 25.03-17.04.2020 | International Association of Universities - IAU (Marinoni et al., 2020) | *Cross-cutting* | 424 HEIs | Global: 109 territories |
| 8-22.04.2020 | The COIMBRA group (Gatti et al., 2020) | *Cross-cutting* | 33 HEIs | Europe: 23 countries |
| 16.04-01.05.2020 | Institute for International Education - IIE (Martel, 2020b) | *Student mobility* | 599 HEIs | National: USA |
| 04.2020. | European Commission (2020) | *Student mobility* | 11 978 students | EU |
| 21.04-03.05.2020 | European Student Union – ESN (Doolan et al., 2020) | *Students* | 17 116 students | Europe: 41 countries |
| 23.04.-26.04.2020. | Aucejo et al., 2020 | *Students* | 1 564 | National: USA – Arizona State University |
| 27.04–18.05.2020 | German Academic Exchange Service - DAAD (Kercher and Plasa, 2020) | *Student mobility* | 173 HEIs | National: Germany |
| 01-24.05.2020 | Times Higher Education – THE (Jump, 2020) | *Cross-cutting* | 200 university leaders | Global: 53 countries/territories |

| 05.05–05.06. 2020 | Aristovnik et al. (based on ESU's questionnaire) | *Students* | 30 383 students | Global: 62 countries |
|---|---|---|---|---|
| 18.05.-20.07. 2020. | Chirikov et al., 2020. | *Students* | 46 071 students | National: USA - 9 universities |
| Ongoing from 07.2020 | Quacquarelli Symonds – QS (QS, 2020a) | *Cross-cutting* | 66 000 students | Global: 198 countries/territories |
| 10.2020. | WonkHE, 2020 | *Students* | 7 327 students | National: UK - 121 HEIs |

### *Reports and expert opinions on the impact of COVID-19 on higher education*

Besides the findings of surveys, an important source for this report were reports published from May to June 2020 by transnational institutions providing analyses and discussions of both short-term and medium-term perspectives and policy implications. Some examples are provided below:

- The European Commission's Joint Research Centre also commissioned and published an overview of the existing literature on the likely impact of COVID-19 on education (Di Pietro et al., 2020) in June 2020.

- The United Nations (2020) provided a comprehensive overview of the implications of COVID-19 on all levels of education at the global level, along with policy recommendations in August 2020 (UN, 2020b).

- The UNESCO International Institute for Higher Education in Latin America and the Caribbean (UNESCO IESALC) report on COVID-19 and higher education from May 2020 includes an analysis of impact, policy responses and recommendations. Although its focus is on Latin America and the Caribbean, it is universal and applicable worldwide (UNESCO IESALC, 2020).

- The World Bank (2020a and 2020b) published two reports (in April and May 2020) on the impact of COVID-19 on tertiary education focused on the crisis response, the impact and the mitigation strategies to be adopted at the level of HEIs and at the policymaking level.

## Good practices and future prospects

Finally, it should be emphasised this analytical report does not only focus on problems and challenges. The COVID-19 pandemic has also demonstrated the resilience of higher education institutions and students and has provided inspiring examples of proactive and creative ways in which challenges can be addressed at short notice. The report includes a number of illustrative good practices of COVID-19 responses throughout Europe. Additionally, the report will also highlight how the current crisis has provided an opportunity to fundamentally rethink certain aspects of how higher education is organised, which could result in a paradigm shift and long-term improvements in higher education in Europe.

As already mentioned, this analytical report references a total of 73 reports, articles and other publications. Because the COVID-19 pandemic has produced such an unprecedented disruption in the higher education system, the body of literature on the impact of COVID-19 is growing rapidly and there are undoubtedly sources that have not been

captured in this initial analytical report, and there will be even more evidence available by the time the report is published. Additionally, since the COVID-19 pandemic is still a recent phenomenon, much of the evidence available at this stage is about the immediate effects of the pandemic and about the expectations and predictions of institutions and students regarding the future. In this sense, rather than provide answers to what the impact of COVID-19 has been, the analytical report identifies the issues that stakeholders consider to be areas of greatest concern, as well as possible policy responses to address those challenges.

# 2. Impact of COVID-19 on teaching and learning

The most visible impact of COVID-19 on higher education has been on higher education institutions' core activities – teaching and learning. This impact can be observed from three perspectives: the higher education institution perspective; the teaching staff perspective; and the student perspective. This section of the report will analyse how higher education institutions responded to the disruption in the delivery of their teaching activities, how these responses have affected students' learning in the short term, and what medium-term implications this might have.

## Higher education institution perspective: immediate response and short-term impact of COVID-19 on teaching and learning

The surveys on the impact of COVID-19 on higher education were conducted between February and July 2020 and the findings mentioned refer to the first wave of the COVID-19 pandemic. Most surveys, especially the early ones, focus on the immediate response of higher education institutions (i.e. in the 2019/2020 academic year) in terms of crisis response plans, infrastructure and equipment. More recent surveys also provide an insight into what challenges may arise in the short term (i.e. the current 2020/2021 academic year).

### *Most higher education institutions successfully transitioned to emergency remote teaching*

According to the survey implemented by the International Association of Universities (IAU) (Marinoni et al., 2020) during March and April 2020, 85 % of higher education institutions in Europe switched to online teaching, while 12 % of higher education institutions were developing solutions. A survey of the COIMBRA group[2] which encompasses 41 European institutions (Gatti et al., 2020, p. 17), shows that by early April 2020 all the surveyed universities from the group had made the switch.

These trends are broadly reflected at the global level. The IAU survey data show that the majority of higher education institutions worldwide had replaced classroom teaching by remote teaching (75 %) by April 2020. However, it is notable that at the global level one quarter of the surveyed higher education institutions reported that at that time most activities had been suspended until solutions to continue teaching and learning were developed (distance learning or self-study). Only 7 % reported that classes had been cancelled[3]. These findings are similar to those of the global-level QS survey from late spring 2020 (QS, 2020a) and the US-based survey carried out by the Institute for International

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[2] The COIMBRA group includes universities from 20 European countries: Austria, Belgium, Czechia, Denmark, Estonia, Finland, France, Germany, Hungary, Ireland, Italy, Lithuania, Norway, Poland, Portugal, Spain, Sweden, Switzerland, the Netherlands and the United Kingdom.

[3] Most of the HEIs where classes were cancelled are from African countries. According to the IAU report, 'only 29% of African HEIs were able to quickly move teaching and learning online, compared to 85% of HEIs in Europe' (Marinoni et al., 2020, p. 24).

Education (Martel, 2020a) from February 2020, which indicate that at least two thirds of higher education institutions moved at least some courses online.

The reviewed surveys did not include more detailed information on how COVID-19 affected universities already providing fully online study programmes. It can be assumed that their teaching and learning processes were not affected significantly, due to having in place the necessary infrastructure, trained teaching staff and suitable teaching and study materials for online learning. Some open universities provided support to other universities struggling to provide emergency remote teaching by sharing their knowledge on online teaching and learning skills (Open University, 2020; Universitat Oberta de Catalunya, 2020).

It can be concluded that the response of higher education institutions to the COVID-19 pandemic worldwide was quick and efficient.

### Most higher education institutions provided some sort of support to the teaching and learning process

According to the Institute for International Education's survey (Martel, 2020a) some US higher education institutions offered technical assistance, webinars and training on online instruction methods to teaching staff, in addition to providing the necessary hardware or software. As a form of support for students, 96 % of the respondent higher education institutions offered online office hours for students. Several higher education institutions reported offering online tutoring for students, 51 % adapted asynchronous learning options for students in other time zones, while 74 % of institutions altered their grading policies (by making them more lenient). Some higher education institutions also reported arranging internet services or hardware loans for students and scholars who did not have access. The support also included setting up emergency funds for staff and students and providing mental health support specifically for COVID-19.

There is less data available on how European higher education institutions supported their staff and students during the pandemic. Only the survey by the COIMBRA group of universities reports that their member universities provided support for teaching staff, which included a team of blended learning experts (learning designers, academic counsellors, e-mentors, learning engineers) and in-house courses (Gatti et al., 2020).

### Higher education institutions experienced initial problems with their capacity for online teaching, which were later resolved

Although a European University Association survey (Gaebel et al., 2014) showed that most European higher education institutions offered e-learning options as early as 2013, and a more recent report confirms that 'digital learning reinforced its presence at higher education institutions' (Gaebel and Zhang, 2018, p. 59), it appears that 'these capacities may not have been sufficient for the suddenly increased demand' (EUA, 2020, p. 3) caused by the transition to emergency remote teaching.

It is not surprising then that according to the COIMBRA group survey, although most universities from the group were able to react quickly, many universities reported initial problems with their capacity for delivering online classes in terms of technology and tools, while some reported outages in the early stages due to high demand, which was fixed during the first weeks of online teaching. (Gatti et al., 2020).

However, it should be emphasised that according to the Times Higher Education survey of university leaders conducted in May 2020 (Jump, 2020), 85 % of 200 HEI respondents[4]

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[4] The study included 200 respondents from 53 countries, with most respondents (56) coming from Europe (EU and Russian Federation), East Asia (54), and North America (30).

consider the transition to remote teaching and learning successful since they were able to organise and deliver online classes.

***There are technology access challenges for both teaching staff and students***

In the World Bank report on the impact of COVID-19 on higher education (World Bank, 2020b), which is the only source that goes beyond simply giving a snapshot of the current situation, but rather explores possible mitigation strategies, and long-term impacts, the following online infrastructure challenges faced by higher education institutions and students are identified:

- Weakness of internet connection and low internet speed
- Expenses for reliable internet connection
- Lack of equipment (computers / laptops / tablets / smartphones) necessary to participate in the online teaching and learning process
- Online tools crashing when many users connect to them simultaneously.

These four factors influence both the teaching side and the learning side of the teaching and learning process, since not many higher education institutions have an online infrastructure which allows massive use, which resulted in their websites and library websites not functioning. Additionally, according to the World Bank report for Europe and Asia, teaching staff lack suitable equipment and 'research facilities do not provide opportunity for remote work' (World Bank, 2020b, p. 6).

***Non-teaching staff is also affected by the changes in the teaching and learning caused by COVID-19***

Although not many reports mention non-teaching staff, they were also faced with the challenge of remote work, while some of them (like IT support services) were also faced with increased workload. According to the UNESCO IESALC report (UNESCO IESALC, 2020), non-teaching staff is 'the most vulnerable sector' in terms of possible jobs reduction resulting from the possible post-COVID measures some higher education institutions might have to implement in order to maintain their financial stability.

## Teaching staff perspective: immediate response and short-term impact

***Teaching staff adapted their teaching material developed for in-person teaching to online formats***

According to Hodges et al. (2020), the type of learning arrangements rapidly established in response to the COVID-19 pandemic should not be considered as online learning, but as 'emergency remote teaching'. Emergency remote teaching 'involves the use of fully remote teaching solutions for instruction or education that would otherwise be delivered face-to-face or as blended or hybrid courses and that will return to that format once the crisis or emergency has abated' and is different from planned and prepared online teaching. Similarly, the UNESCO IESALC report also makes use of the term emergency remote teaching, defining it as 'transforming the presential classes to a virtual mode, but without changing the curriculum or the methodology' (UNESCO IESALC, 2020, p. 25).

Therefore, the teaching content created and used by the teaching staff after moving online was in fact not designed for online teaching but was an emergency response to new circumstances in which in-person teaching was not possible. It should be emphasised that there was not enough time to plan and prepare the teaching content in a way which is usual for online courses (e.g. using some of the known instructional design models such as ADDIE which includes stages of analysis, design, development, implementation and evaluation and require a substantial amount of time). Furthermore, most teaching staff lacked training in online teaching, so most of the teaching was a more or less improvised

adaptation of the content prepared for the classroom to make up for the lack of in-person classroom time.

According to the European Student Union (ESU) survey (Doolan et al., forthcoming)[5], the following formats were used to replace the in-person teaching:

- live-streamed lectures in real time (74.6 %)
- teaching staff sending their presentations to students (44.5 %)
- asynchronous pre-recorded lectures available online (32.1 %)
- asynchronous audio-only recorded lectures available online (20.6 %).

Aristovnik et al. (2020) report similar findings[6]:

- real-time video conferences (59.4 %)
- teaching staff sending their presentations to students (15.2 %)
- asynchronous pre-recorded lectures available online (11.6 %)
- written communication using forums and chats (9.1 %)
- asynchronous audio-only recorded lectures available online (4.7 %).

Gatti et al. (2020) confirm these findings for the COIMBRA group of universities and add another format – asynchronous self-study materials posted on HEIs' learning management systems.

### Teaching staff readiness for the switch to emergency remote teaching is diverse

The IAU survey (Marinoni et al., 2020) finds that the level of teaching staff readiness is diverse and that the switch to the emergency remote teaching was more difficult in the fields which have a practical component. These fields include, among others, clinical medicine and veterinary studies which depend on access to laboratories, as well as disciplines such as arts, music or design where access to equipment is necessary or teaching success depends on students' interactions. This is compatible with the ESU survey which suggests that 'students in the fields of Arts and Humanities and Social Sciences, Business and Law were the most satisfied […] Students in Agriculture and veterinary medicine and health and welfare fields were the least satisfied with teaching and administration during the pandemic, possibly because their course consists of practical work which was difficult to organize during lockdown.' (Doolan et al., 2020, p. 46).

The World Bank report (World Bank, 2020b) argues that not all teachers were ready to make the transition to emergency remote teaching, as a result of the lack of skills and training in this area and due to the lack of learning materials available online. In addition, the report notes that 'the distance mode does not always allow for advanced ways of teaching in terms of group work, discussions, interactive project work, etc., which as a result affects the development of soft skills among students.' (World Bank, 2020b, p. 6) And additionally, the 'tendency to focus on delivering cognitive skills at the expense of socioemotional skills' was noticed (World Bank, 2020b, p. 6).

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[5] The survey included respondents from 41 European countries, with highest number of respondents from Portugal, Romania, Croatia and the Czech Republic.
[6] The survey included respondents from 133 countries and 6 continents, with the highest number of respondents from Poland, Italy, Mexico, Chile, Turkey, India, Ecuador, Bangladesh, Portugal, and Slovenia.

> **Box 2.1. COVID-19 responses: illustrations of good practice**
> ***Ireland: €5 million COVID-19 fund for teaching and learning reforms***
>
> Ireland's National Forum for the Enhancement of Teaching and Learning in Higher Education, in partnership with the Higher Education Authority, launched a €5 million fund designed to drive teaching and learning innovation in order to improve how to teach and learn in a digital world. The scheme was launched as a response to COVID-19's ongoing impact on the higher education sector, with the aim of strengthening student success across face-to-face, blended, online and remote teaching and learning contexts. The open call represents an opportunity to support higher education institutions to consolidate any positive disruptions that may have occurred during the COVID-19 pandemic, in order to enhance efforts towards holistic approaches to enabling student success in the new environment.
>
> Source: National Forum for the Enhancement of Teaching and Learning in Higher Education 2020)

### Despite the challenges, the overall assessment of emergency remote teaching is positive

Although there were concerns about the quality of teaching, the extent to which teaching staff efforts to rapidly adapt to the COVID-19 pandemic succeeded or not can be assessed through the view expressed by HEI representatives and students regarding their experience of the switch to emergency remote teaching.

According to the Times Higher Education survey (Jump, 2020) most respondents (85 % of higher education institutions) think that the transition to an online teaching environment was successful. Of the 2000 responding higher education institutions, 40 % believe that online teaching quality is as good as on-site teaching, while only 19 % believe that the quality has dropped with the transition[7].

It appears that students were also generally satisfied with the quality of emergency remote teaching. The European Commission's survey of mobile learners within the Erasmus+ and European Solidarity Corps programmes (European Commission, 2020) shows that the attitudes of the respondents towards online activities are mostly positive. For instance, 71 % of participants think that digital learning tools and platforms work very well and an equal percentage think that the teaching and supporting staff run the activities well: 63 % of the respondents find the quality of activities good, and more than half (55 %) believe they encourage participants to learn. However, it should be pointed out that Erasmus+ higher education institutions have good infrastructure (as a requirement for participating in the programme) so this finding might not be representative of all higher education institutions.

It should also be noted that it is 'far too premature to assess the quality of teaching for a population of teachers who were not familiar with digital education... If the format of student assessment has also undergone a major change, we cannot attribute it to poor quality teaching alone.' (Jump, 2020).

### Teaching staff well-being during emergency online teaching is under-researched

There are very few surveys which research teacher well-being during emergency online teaching. The COIMBRA group survey (Gatti et al., 2020) finds that the transition resulted in increased workload for the teaching staff from the group member countries and as a result 'several universities reported that some teaching staff are struggling with the challenges of adapting to remote emergency teaching, family obligations (childcare, home schooling, …)' (Gatti et al., 2020, p. 19), while the European Association for International

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[7] The study included 200 respondents from 53 countries, with most respondents (56) coming from Europe (EU and Russian Federation), East Asia (54), and North America (30).

Education's (EAIE) survey (Rumbley, 2020)[8] finds that roughly 17 % of respondents reported concern or frustration related to information or action gaps, and 28 % of respondents expressed worry, uncertainty, or inconvenience.

***Student assessment and academic integrity in the context of online learning is an area of concern, but is yet under-researched***

None of the surveys of higher education institutions provided information on plans or practices relating to adapting assessment procedures to emergency online teaching. However, academic integrity and assessment in the context of emergency remote teaching has been identified as a significant concern by quality assurance agencies. An international forum organised in May 2020 by the UK's Quality Assurance Agency for Higher Education from the UK (QAA, 2020) found, based on discussions with 50 representatives from quality assurance agencies in Africa, Asia, Australia and Europe, that student assessment and academic integrity are seen as particularly challenging for the higher education sector as a whole. According to the World Bank (2020b, p.9), this issue is exacerbated by a 'general distrust in the quality of remote learning, accompanied with the fact that the regulatory environment is not yet sufficiently aligned with online learning', meaning that there will soon be a pressing need to define suitable quality assurance policies for such educational delivery. Until such system-level solutions are defined, higher education institutions are adopting institutional level policies for student assessment to ensure academic integrity (see Box 2.2).

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**Box 2.2. COVID-19 responses: illustrations of good practice**
***UK: Academic integrity for assessments affected by COVID-19
at the University of Bristol***

The University of Bristol updated its institutional policies for student assessment due to the impact of COVID-19, since students had to undertake assessments remotely and without the usual invigilation procedures. The revised policy document reiterates the importance of academic integrity and defines recommendations for staff and students on how to adapt student assessment to new circumstances. Examples of alternate forms of assessment and/or of additional actions to be taken by academic staff include:

- Providing students with statements on the nature of the assessment (summative or formative, what resources they may use, time allowed and what degree of collaboration – if any – is acceptable).

- Providing cover sheets for assessments (a statement for any online or 'take-home' assessment detailing what is allowed).

- Holding vivas for examinations (inviting students to talk through their examination papers).

Source: University of Bristol (2020)

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## The student perspective: immediate and short-term impact

This section will summarise the findings of surveys exploring how students responded to the disruption caused by COVID-19 and to their new learning environments. The findings related to the difficulties and hardship faced by students during COVID-19 will be then explored in more detail in the next chapter focusing on the social dimension of higher education.

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[8] The survey included respondents from the 38 European countries (including Kazakhstan), with the highest number of respondents from France, Germany, Italy, the Netherlands, Spain and the United Kingdom.

***A significant proportion of students consider that their academic performance was negatively affected***

The findings of the ESU survey (Doolan et al., forthcoming) indicate that almost half of all surveyed students (47.43 %) believed that their academic performance changed for the worse since on-site classes were cancelled. This finding may initially seem to contradict the previous finding of the same survey that students were generally satisfied with the quality of emergency remote teaching. However, the findings demonstrate that satisfaction with the *delivery* of teaching should be not be conflated with satisfaction with *study conditions*. Indeed, as will be shown below, students' capacity for online learning is diverse and students still prefer on-site teaching to online teaching. Additionally, as will be further explored in Chapter 3, certain groups of students that experience challenges related to their study conditions are likely to consider that their academic performance has dropped (see p. 35).

***Students' capacity for online learning is diverse in terms of access to technology and study material***

The ESU survey also indicates that while 89.3 % of students have their own computer, only 41 % always have a good internet connection. Although these findings show that most students do have the necessary equipment, it appears that this does not guarantee full access because only a third of students reported always having access to course study material. Furthermore, the ESU survey findings showed that students with a quiet place to study, with a good internet connection and with access to course material adjusted better to the new online learning environment. This is in line with the findings of the IAU survey, which indicate that the students at risk are those who lack access to online communication tools and the internet (Marinoni et al., 2020).

It is interesting to note that according to the European Commission's survey of mobile learners (European Commission, 2020) as many as 69 % of respondents report that they miss the physical access to certain educational facilities, such as libraries. According to the ESU survey, this can be explained by the fact that libraries are an important resource since they provide access to study materials and a quiet place for studying. Not having physical access to libraries affects students who do not have favourable home conditions the most (Doolan et al., forthcoming).

***Students' capacity for online learning is diverse in terms of digital competences***

When asked about their digital skills in the ESU survey, as many as 80.7 % of students reported being confident in using online learning platforms. Nevertheless, 7.9 % of students indicated having a lack of confidence in using online learning platforms, while the remaining 11.4 % had a neutral attitude. Furthermore, students reported that they preferred to study at 'one online platform in a similar manner for all the courses' (Doolan et al., forthcoming, p.6).

The global-level survey by Aristovnik et al. (2020) confirms that students mostly reported being confident in their use of online communication platforms, although when asked about their least developed digital skills the respondents singled out 'those connected with adjusting the advanced settings of some software and programmes and using online teaching platforms' (p. 10).

***Students prefer online formats that include real-time interaction with teaching staff***

As many as 81 % of respondents of the European Commission survey of mobile learners (European Commission DG EAC, 2020) report missing the person-to-person interaction. Therefore, it is not surprising that the UNESCO IESALC report (UNESCO IESALC, 2020) finds that 'the traditional distance education mode, where the teacher continues to teach in a regular class setting that is broadcast live and can be retrieved at a later time, seems

to be the most appreciated by students because this best reproduces the dynamics to which they are accustomed' (UNESCO IESALC, 2020, p. 20).

Similarly, the findings of the ESU survey (Doolan et al., forthcoming) indicate that the preferred method for 57.43 % students was synchronous i.e. teaching staff lecturing in real time. This might explain why students were less satisfied with online seminars and practical classes which normally include a higher level of interaction which could not be achieved in an online learning environment. The students' preference of asynchronous formats was as follows: 21.26 % of students preferred asynchronous pre-recorded lectures available online, 10.64 % of students reported that they preferred presentations available online, while only 4.02 % of students preferred audio recordings of lectures.

Similar preferences were confirmed by the findings of Aristovnik et al. which show that the students were the most satisfied with real-time video conferences, followed by asynchronous formats (pre-recorded lectures available online, presentations available online, and written communication). They were the least satisfied with audio recording (Aristovnik et al., 2020).

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**Box 2.3.: COVID-19 responses: illustrations of good practice**
*US: Identifying success factors for online teaching and learning*

A survey carried out by Oregon State University (quoted in QS, 2020b) asked for staff and student feedback on online learning and identified six factors which improve online learning and teaching experience, which can provide a useful set of guidelines for planning successful online teaching:

- **Compassion** – the teachers show compassion for students under stress due to emergency circumstances.
- **Clarity** – the teachers provide clear instructions, their expectations are clearly defined, and the content is well-structured.
- **Organisation** – there are clear connections between learning outcomes and class activities and assessments.
- **Multifacetedness** – courses provide students with many ways to learn and to interact with the content, the instructor, and other students and use adequate methods and collaborative tools.
- **Flexibility** – due dates, learning outcomes, attendance criteria are more flexible.
- **Engagement** – students are involved 'through increased communication, polls, live discussions, or other activities'.

Source: QS (2020b, p. 7)

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### *Students' workload increased during emergency online teaching*

The UNESCO IESALC (2020)[9] report mentions the information overload syndrome experienced by both teachers and students during the COVID-19 pandemic, resulting in feeling overwhelmed by the excessive amount of information they are exposed to through educational platforms, mobile applications, and email. The findings of the ESU survey (Doolan et al., forthcoming) confirm this since more than half of the students surveyed reported having a larger workload since the transition to online teaching and learning was made. Only 19.04 % reported having a smaller workload than before, while 25.46 % reported no changes.

### *Students' psychological and emotional well-being is threatened*

According to Doolan et al., students 'frequently felt frustrated, anxious and bored in relation to their academic activities since on-site classes were cancelled' (Doolan et al., forthcoming, p. 6), while according to Aristovnik et al. (2020) students reported the

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[9] According to the authors, although the UNESCO IESALC report focuses on the Latin American and Caribbean region, the research findings and recommendations apply worldwide.

prevalence of negative emotions, such as boredom, anxiety, frustration, anger, hopelessness and shame. Further analysis on this challenge is explored in Section 3 of this report on the social dimension of higher education.

## The medium-term impact (2021-2025)

Emergency remote teaching as a global response to the COVID-19 pandemic is unprecedented, and it is therefore difficult to predict the medium-term implications (in the next four years) because there is no previous experience to resort to in terms of lessons learnt. However, some reports offer some views on the possible medium-term impact of COVID-19 on higher education, and on teaching and learning in particular.

The potential medium-term risks are explored in the World Bank (2020a) report, which identifies possible permanent closures of study programmes and higher education institutions as a result of the impact of the pandemic. In terms of teaching and learning, if the impact of the pandemic may result in a permanent movement of more study programmes to online/remote platforms. This in turn opens a number of questions about how to achieve such a migration effectively and how to adapt quality assurance regulations for a more flexible approach to address the online and blended delivery of study programmes. A medium and even long-term risk may also be increased graduate unemployment, due among other factors to decreased confidence in the quality of remote education (due to lower requirements at exams and potential learning losses).

A further risk in the medium term that is strongly emphasised in reports of the World Bank (2020a) concerns equity in higher education: how to ensure that underrepresented, vulnerable and disadvantaged students are not 'left behind' due to challenges with new learning environments, lack of technological access and lack of academic, financial and psychological support. These concerns are explored in more detail in the next chapter.

Despite the many risks facing higher education in the long term due to COVID-19, many reports and expert opinions focus on new opportunities to reflect critically on established (sometimes traditional) practices in higher education and to make much-needed changes. In the area of teaching and learning, Rizvi (2020) argues that we should consider 'how online pedagogy might help to radically overhaul the nature of student engagement and student–teacher relations, how the processes of knowledge ownership, creation, distribution and utilization might be reimagined, and how the idea of learning itself might be re-conceptualized' (p. 1315). More concretely, Kalantzis and Cope (2020) make the case that the unprecedented move to online learning should result in questioning the conventional wisdom that 'the gold-standard for learning is traditional face-to-face, while online is second-best' (p. 51). Based on their research in the US, they show that, using the right tools and methods, online learning can both be completely different and potentially superior to in-person teaching. However, the current generation of educational technologies is not suited to this purpose and these 'mostly do little more than reverse-engineer traditional classrooms' (p. 52).

Although continuing education programmes are not in the focus of this report, it is foreseeable that the move to online learning will make them more interesting for higher education institutions in the medium-term. Being affordable and flexible makes them available to a wider audience, while being short and stackable makes them interesting in times when adaptability to new conditions is a desirable characteristic on the labour market. As emphasised by the European Commission, 'continuous learning recognised through micro-credentials can fill existing and emerging skills gaps' and the demand for short learning options will grow in the times of post-COVID recovery (European Commission DG EAC, 2020c).

There are currently no further data or analyses that would allow for more accurate predictions about the possible future impact of COVID-19 on higher education. However,

it would be interesting for future research in this area to explore the psychological effect of the new environment on teaching staff and students, the immediate academic impact (e.g. the drop-out rates, the possible negative trends in student achievement and the effects on teaching staff autonomy) and the impact on assessment and quality assurance. In a broader sense, the post-COVID period may result in fundamentally rethinking our approaches to higher education teaching and learning and may provide an opportunity to achieve new visions of how higher education can respond to societal needs, as put forward for example by UNESCO in *Rethinking Education. Towards a Global Common Good?* (UNESCO, 2015). With time and more research, we will be able to tell whether the shift to emergency remote teaching was a learning opportunity which will lead to a corresponding 'shift in mindset' (Marinoni et al., 2020, p. 26).

## Policy implications and recommendations

Some of the research reports analysed include policy recommendations. What follows is a table overview of summarised recommendations regarding teaching and learning in the short and medium term.

| Level of intervention | Policy recommendation | Source |
|---|---|---|
| **SYSTEM LEVEL** | | |
| **Strategy** | Apply the lessons learnt during the pandemic to reimagining post-COVID higher education. | UNESCO IESALC (2020) |
| | Include higher education in the stimulus plans for economic and social recovery. | |
| | Forge a national consensus for a strategy for fostering recovery and innovation in higher education. | |
| **Funding** | Support and provide the means for higher education institutions to enhance their online teaching potential. | Doolan et al. (2020) |
| | Invest in online infrastructure (broadband, system-level support services for higher education, funding schemes etc.) | Authors |
| **Coordination** | Define new regulations regarding quality assurance and qualification recognition in the context of remote learning, including provisions safeguarding academic integrity. | Authors (based on QAA, 2020) |
| | Provide guidance regarding online platforms, online proctoring, data protection and teaching. | |
| **Research** | Conduct research on the consequences of the disruption in teaching and learning caused by the COVID-19 pandemic (quality of teaching, learning losses, psychological well-being of teachers and students, teacher autonomy, drop-out rates, effects of exam and grading criteria relaxation, students' outgoing competences recognition, value of the qualification, etc.). | Authors |
| | Share information gathered through research and make recommendations for institutions and public policy. | Authors |

| HIGHER EDUCATION INSTITUTION LEVEL | | |
|---|---|---|
| **University management** | Apply the lessons learnt during the pandemic to the development of new post-COVID teaching and learning models (face-to-face vs online and/or hybrid, rethinking physical spaces). | Authors |
| | Develop long-term online learning strategies. | Authors |
| | Rethink the one-person teaching model and design a transition towards a teamwork teaching model (teaching staff supported by multidisciplinary teams). | Authors |
| | Create protocols for protecting academic integrity, i.e. for combating fraud and online cheating. | Authors (based on QAA, 2020) |
| | Address data protection concerns by creating security protocols etc. | Authors |
| | Invest in the university's online infrastructure. | Authors |
| | Invest in effective online learning tools and platforms. | Gatti et al. (2020), World Bank (2020a) |
| | Provide extensive structured professional training for academic and administrative staff in online and hybrid teaching. | ESU (Doolan et al. (2020) |
| | Adapt quality assurance mechanisms. | Gatti et al. (2020), World Bank (2020a) |
| | Identify at-risk students to minimise inequalities. | World Bank (2020a), UNESCO IESALC (2020) |
| **Support services** | Train the teaching staff for online teaching. | Gatti et al. (2020); World Bank (2020a) |
| | Organise multidisciplinary teams comprised of pedagogical and technological experts to provide support to the teaching staff for preparing and implementing online teaching. | Authors |
| | Develop students' digital competences for online learning. | Gatti et al. (2020); World Bank (2020a) |
| | Provide accessible and user-friendly counselling and guidance for students in order to find appropriate solutions for academic, health, and career challenges. | Doolan et al. (2020) |
| | Provide interactive support to teachers and students. | Gatti et al. (2020); World Bank (2020a) |

| Teaching and learning | Create easily accessible online teaching and study materials. | Authors |
|---|---|---|
| | Adapt assessment and grading to online teaching and learning. | Gatti et al. (2020)<br><br>World Bank (2020a) |
| | Use one platform to access all resources. | Gatti et al. (2020)<br><br>World Bank (2020a) |
| | Document the changes in teaching and learning models and their impact. | Gatti et al. (2020) |
| | Evaluate and redesign teaching methods to respond to the requirements of the online teaching and learning environment. | World Bank (2020a) |

# 3. Impact of COVID-19 on the social dimension of higher education

## Background: key facts related to the social dimension of higher education in Europe

The 'social dimension' of higher education has been a core issue for the European Higher Education Area (EHEA) since 2001. In 2007, the London Ministerial Communiqué (2007) provided the first complete definition of the social dimension, namely that 'the composition of the student body entering, participating in and completing higher education at all levels should correspond to the heterogeneous social profile of society at large in the EHEA countries'. This definition allows the creation of policy levers for identifying underrepresented, disadvantaged, and vulnerable students in higher education, and for improving their prospects so that access, participation, and completion of higher education 'depend primarily on students' abilities, not on their personal characteristics or circumstances beyond their direct influence' (Rome Ministerial Communique, Annex II, 2020). This includes an individual's background, socioeconomic characteristics, gender, race, ethnicity, impairments, etc.

Improving the social dimension of higher education is part of the first goal of an 'inclusive EHEA' proclaimed in the latest 2020 Rome Ministerial Communiqué (2020) for the period 2020-2030. Its starting point is the definition of the social dimension of the 2007 London Communiqué. The Rome Communiqué goes beyond this definition and stresses that the social dimension encompasses the creation of an inclusive environment in higher education that fosters equity and diversity and is responsive to the needs of local communities. It means that public authorities and higher education institutions should integrate the newly adopted "Principles and Guidelines to Strengthen the Social Dimension of Higher Education in the EHEA"[10] into the 'core higher education mission: learning and teaching, research, innovation, knowledge exchange and outreach, institutional governance and management, as well as in the policies for empowering present and future students and higher education staff'.

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[10] This document is Annex II to the 2020 Rome Ministerial Communiqué.

Therefore, improving the social dimension by moving beyond widening accessibility clauses and focusing on integration of the newly adopted social dimension principles and guidelines in the core higher education mission and governance is a crucial step forward strengthening inclusion, equity, and diversity in higher education systems and institutions.

The social dimension is equally prominent in European Commission priorities for higher education. In the *Renewed Agenda for Higher Education* (European Commission, 2017) one of the four priorities is 'Building inclusive and connected higher education systems', which emphasises the need for measures to support the social groups least represented in higher education to be able to access and complete higher education 'based on their talents, not their background'. In the more recent communication from the European Commission *Achieving the European Education Area by 2025* (European Commission, 2020) one of the six dimensions necessary to further develop the EEA refers to inclusion and gender equality. This dimension stresses that 'educational attainment and achievement should be decoupled from social, economic and cultural status, to ensure that education and training systems boost the abilities of every individual and enable upward social mobility'. Inclusion is perceived as 'a key objective to ensure accessible higher education institutions, open to a diverse student and researcher body, and offering more opportunities for lifelong learning' (European Commission, 2020).

The state of the social dimension of higher education in Europe has been documented systematically by the EUROSTUDENT survey, which has been providing data on the social and economic conditions of student life in Europe for the past 20 years. The EUROSTUDENT VI survey findings (Hauschildt et al., 2018) provide the following insights regarding the social dimension of student life in the EHEA 2016-2018[11]:

- Students whose parents have not attained tertiary education are underrepresented in almost all countries. These students are more likely to enrol in professional higher education (e.g. universities of applied science) and short-cycle programmes or in bachelor programmes. They tend to be older, enter higher education later and tend to rely on paid employment and public support rather than family support in a majority of countries.
- 15 % of students have physical, mental or health-related impairments that negatively impact their studies. On average, a quarter of students with impairments often feel they do not belong in higher education.
- In the majority of European countries, 10 % of students have children.
- 20 % of students come from families that are not well-off financially.
- 51 % of students have paid jobs during their studies, and half of those students state that they would not be able to afford studying at all without those paid jobs.
- 26 % of students on average experience serious or very serious financial difficulties (in some countries up to 40 %): it relates very often to students from low educational backgrounds to students with delayed transition into higher education and international students. Accommodation costs usually account for students' most important expenditure item.
- On cross-country average, students' total monthly income including transfers in kind consists of: contributions from family/partner 47 %, students' self-earned income 34 %, national public student support 14 %, and other income sources 5 %.

The analysis below will examine what evidence has emerged on the impact of the COVID-19 pandemic on the social dimension of higher education in Europe.

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[11] 28 countries participated in the EUROSTUDENT survey, including 22 out of 28 EU Member States and six countries from the wider European Higher Education Area.

## Immediate impact of COVID-19 pandemic on the social dimension of higher education

The concern that underrepresented, disadvantaged and vulnerable students[12] in higher education will be disproportionally affected by the COVID-19 pandemic is emphasised in the World Bank (2020a) analysis on the impact of the pandemic on higher education. Noting that the equity implications for low-income or at-risk students have academic, social, financial and physical dimensions, the World Bank notes that there is an increased risk of drop-out of these groups. The Young European Research Universities Network (YERUN, 2020) also warned of the phenomenon of 'digital poverty' that excludes certain learners from the distance learning process, of the need to adapt new learning content for students with hearing or visual impairments and of the need to support students and teaching staff affected by mental health issues as a result of the disruptions caused by the COVID-19 pandemic.

### *Overview of challenges faced by European students during the COVID-19 pandemic*

To find out to what extent these concerns materialise in practice, we can turn to the first transnational survey about the impact of the COVID-19 pandemic on students in the EHEA, which was carried out for the European Student Union by a team of researchers from the University of Zadar (Croatia), and supported by the Institute for the Development of Education (Croatia) and the Croatian Ministry of Science and Education (Doolan et al., forthcoming)[13]. In the previous section of this report on Teaching and Learning, the findings of the same European Student Union survey were referenced to show that, while students were generally satisfied with the delivery of online teaching, almost half of all surveyed students (47.43 %) believed that their academic performance had worsened since on-site classes were cancelled. In this section, we summarise the insights the survey provides about challenges faced by European students regarding their study conditions and living conditions:

*Learning and teaching challenges:*

- 34.4 % of students did not often have a quiet place to study (3.3 % not at all). 6.4 % of students often did not have access to a desk (3.2 % not at all).
- The survey demonstrates that the majority of students have their own computer (89.3 %), however, almost 60 % reported they do not always have a reliable internet connection.
- Only 31.9 % students reported that they always have access to course study materials.
- The majority of students (80.7 %) feels confident in using online teaching platforms. However, 7.9% indicated a lack of confidence in using online teaching platforms.

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[12] A Glossary of Terms and Definitions for underrepresented, disadvantaged and vulnerable students is part of the 2020 Rome Ministerial Communiqué, Annex II.

[13] The authors of the survey mention in their report the following methodological note: In total, 17 116 respondents from 41 European countries accessed the questionnaire. Countries which had a higher number of respondents include Portugal (6 652), Romania (3 110), Croatia (2 029) and the Czechia (1 768). Out of the initial sample, 12 336 (or 72.61 %) of them reported that their on-site classes were cancelled due to the COVID-19 pandemic. However, after filling out the socio-demographic and academic characteristics block of questions, 9 196 students continued with the survey. The total number of students who responded to a particular question varied between different questions, which resulted in variation in the total number of responses, meaning that a certain number of missing values is present. This fluctuation in the total amount of responses is common in research like this.

*Funding challenges:*

- 41.1 % of students who worked during their studies lost their jobs (28.9 % temporarily, 12.2 % permanently). These students are now significantly less capable of covering their study and living costs, compared to all other groups of students.
- 9.6 % of students encountered issues with their scholarship status (payments reduced, postponed or cancelled).
- 14.7 % of students had significant financial concerns about their study costs and 19.8 % had significant financial concerns about their living costs. In particular, a higher proportion of students who lived in rented accommodation and student dorms reported being worried about the costs of studying and living in comparison to students who lived in their family homes or in some other accommodation.
- For students paying tuition fees, the majority of students (75.3 %) answered in this survey that their tuition fee payments have remained the same at their institution. For some students, more flexible payment methods of tuition fees were introduced (13.8 %), and 1.8% reported their institution had cancelled tuition fee payment for this term.

*Students' well-being challenges:*

- Students have frequently felt frustrated, anxious, and bored in their academic activities since on-site classes had been cancelled. The results indicate that students' well-being during the COVID-19 pandemic might have been negatively affected. Lower levels of general well-being were reported by students who do not have a supportive social network: 9.1 % of students indicated that they do not have several people they can trust to help solve their problems

The European Student Union survey also demonstrates that 45.5 % of students prefer to talk about the COVID-19 crisis with close family members, followed by a close friend (32.8 % of students). Only 1.5 % of students would turn to institutional sources of support such as administrative staff. On the other side, if they would like to talk about problems related to studying issues (lectures, seminars, practical work), 32.4 % of respondents would first turn to their colleagues, while 31.6 % of our respondents would first talk to a close friend, and 18.9 % chose the answer "close family member". Only 5.8 % of students would turn to administrative staff at their institution. Therefore, students very often do not seek institutional support for problems they may have.

### *Identifying students more likely to face difficulties with their academic progress, well-being and financial situation*

The European Student Union survey also provides valuable insight into which students were more likely to face difficulties during the COVID-19 pandemic, as presented in the table below.

*Table 2. Characteristics of students more likely to face challenges during COVID-19 pandemic[14]*

| Challenges | Characteristics of students more likely to face these challenges |
|---|---|
| **Perceived drop in performance** | • Students in the 1st or 2nd year of the first study cycle)<br>• Male students<br>• Students who reported having mental health problems[15]<br>• Students who do not have a quiet place to study<br>• Students who do not have adequate access to course study material<br>• Students with low digital skills<br>• Students with no adequate access to a good internet connection<br>• Students with insufficient access and participation in supportive social networks |
| **Lower levels of general well-being** | • Younger students (students at lower levels of study)<br>• Female students<br>• Students who do not pay tuition fees<br>• Students who have reported having mental health problems and other health problems<br>• Students who do not have a quiet place to study<br>• Students who do not have a computer<br>• Students who do not have a good internet connection<br>• Students who do not have adequate access to course study material<br>• Students with low digital skills<br>• Students who do not have a supportive social network<br>• Students who have problems balancing care responsibilities with studying (e.g. childcare) |
| **Financial concerns** | • Mature students<br>• Students whose parents have lower levels of education<br>• Part-time students<br>• Students who do not pay tuition fees<br>• Students with health problems (chronic illness, mental health problems, physical disabilities)<br>• Students who live in rented accommodation and student dorms, as opposed to students who live in their family homes<br>• Students who have lost their job permanently as a result of the COVID-19 pandemic |

Source: Compiled by author based on Doolan et al. (forthcoming)

The survey report concludes that, after all other predictors are statistically controlled for, the following groups of students consistently encountered more challenges in adjusting to studying during the COVID-19 pandemic lockdown: younger students; students who do not have a quiet place to study, a good internet connection and material for studying at their disposal; students with lower levels of digital skills; and students lacking a supportive social network. In addition, students who reported having mental health problems consistently had lower scores on all indicators of adjustment. Measures to address the challenges faced by such groups are identified in the section 'Policy Implications'.

Another team of researchers (Aristovnik et al., 2020) adopted the previous research design of the European Student Union survey, expanded some of the survey question and applied it to students at the global level. The findings of this survey are broadly in line with the

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[14] Methodological note: The students groups listed under the first two challenges ('Perceived drop in performance' and 'Lower levels of general well-being' are listed as the result of a regression analysis (identifying the most important predictors of the examined outcomes) whereas the students' groups under the challenge 'Financial concerns' are listed as correlations.

[15] The survey questionnaire asked students to report whether they currently have difficulties regarding their mental health. The questionnaire did not ask students to specify whether they already had such difficlities before the COVID-19 pandemic.

findings of Doolan et al. (forthcoming), with some variations that can be attributed to the global scale of the survey. The survey findings for the social dimension of higher education are the following:

- Students receiving a grant and students with a higher ability to pay for their studies also have a greater chance of reaching a higher level of overall satisfaction with university compared to students with financial problems.
- Socio-demographic factors are important predictors of satisfaction and perception of specific segments, with the following groups of students more likely to be dissatisfied: part-time students; undergraduate students; applied sciences students; students with lower living standards (those not able to pay their costs, without a scholarship and those who had lost their job due to the pandemic).

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**Box 3.1: University responses to the COVID-19 pandemic: illustrations of good practices that support the social dimension of higher education**

**University Jaume I (Spain):** offered students in economic distress the possibility to borrow laptops and 4G USB drives to help them access online teaching. The University also adopted a decision to postpone the payment of April tuition fees to more than 5 200 Bachelor and Master students to mitigate the economic impact of COVID-19.

Source: https://en.unesco.org/news/universities-tackle-impact-covid-19-disadvantaged-students

**University of Maastricht (the Netherlands):** the university launched a crowdfunding campaign and offers students the opportunity to obtain an interest-free loan for a couple of months.

Source: https://en.unesco.org/news/universities-tackle-impact-covid-19-disadvantaged-students

**University of Strasbourg (France):** identified 160 students whose lack of materials (computer, internet connection) jeopardised their ability to continue their studies remotely as well as pass their exams. The university and its foundation consequently set up an Emergency Fund for these students and raised €61 000 that helped to distribute more than 100 computers to students in need. It is currently trying to find a solution for the students who do not have an internet connection.

Source: https://www.coe.int/en/web/education/how-do-schools-and-universities-cope

**The University of Luxembourg** took a more lenient approach to payments for student apartments managed by the university and distributed laptops to students who did not have their own.

Source: EMN/OECD (2020)

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### *National-level analyses of the social dimension of higher education*

Comparing these transnational findings to national-level research in the UK and the US provided below shows similar findings. However, it is important to contextualise the UK and the US findings and acknowledge that the UK is the country with the highest tuition fees in Europe and that the United States is the country with the highest tuition fees (at public higher education institutions) in the world (OECD, 2020, p.333), which poses specific equity challenges regarding access and affordability. Nevertheless, the surveys below provide invaluable insight into the range of equity challenges faced by underrepresented, disadvantaged and vulnerable students in different national contexts as direct consequence of the COVID-19 pandemic.

In the UK, a survey by the Sutton Trust (Montacute and Holt-White, 2020) showed that:

- 6 % of students did not have sufficient access to computers or devices required for learning and assessment, 5 % did not have sufficient internet access, and 23 % lacked access to a suitable study space.
- 30 % of students were less able to afford to study because of the pandemic.

- 34 % of students lost their job and/or lost earnings, and 22 % of students reported that their parents were less able to support them financially.
- 30 % of students were dissatisfied with the financial support offered by their university during the crisis, with 36 % satisfied. However, many students are unsure, indicating a lack of awareness of what support their university could offer.

Another survey in the UK by Major et al. (2020) showed that students from the lowest income backgrounds were more negatively affected than higher-income students in terms of learning losses during the pandemic. Emerging research from the US also provides additional insights on the ways in which the COVID-19 pandemic has impacted students from underrepresented, disadvantaged and vulnerable groups. A survey carried out by Aucejo et al. (2020) on 1500 students at one of the largest public universities in the United States (Arizona State University) demonstrated that the negative impact of the pandemic on students was much larger for lower-income students:

- Lower-income students, racial minorities and first-generation students experienced larger negative impacts on the academic outcomes compared to their peers. While 13 % of all surveyed students planned to delay their graduation due to the COVID-19 pandemic, lower-income students were 55 % more likely to delay graduation than their more affluent classmates, they expected 30 % larger negative effects on their academic results for the semester due to COVID-19, and they were 41 % more likely to report that COVID-19 impacted their choice of courses.
- Non-white students were 70 % more likely to report changing their study course compared to their white peers
- First-generation students were 50 % more likely to delay their graduation than students with higher educated parents.

Other research from the US (Means et al., 2020) confirmed challenges faced by low-income students and minorities, with Hispanic students identified as the group facing the greatest challenges to their continued participation in their study programmes after instruction went online, due to difficulties relating to balancing study and home/family responsibilities, finding a quiet place to study, having greater internet connectivity problems and not knowing where to ask for support during their studies.

Finally, another US-based survey carried out by the Student Experience in the Research University Consortium (Chirikov et al., 2020) between May and July 2020 at nine public research universities provides several insights that are both highly valuable and alarming regarding the mental health of students during the pandemic. According to the survey results, 35 % of undergraduate and 32 % of graduate students screened positive for major depressive disorder and 40 % of all students screened positive for generalised anxiety disorder. The survey also found that the relatively small share of students that struggled with remote teaching were more likely to screen positive for mental health issues than those who said they had adapted well. Groups more likely to be affected by depression (i.e. groups in which more than 50 % screened positive for depression, anxiety or both) were low-income and working-class students, LGBT students and students who are caregivers to children or other adults.

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**Box 3.2: National system level responses to the COVID-19 pandemic: illustrations of good practices that support the social dimension of higher education**

**Universities UK:** Universities UK published a set of principles and areas to consider, which provide a framework to reaffirm and clarify the actions that individual universities in the UK should consider to best support students' physical, mental and emotional well-being. To accompany this commitment, Universities UK has published a checklist to guide universities that are supporting students who are self-isolating.

Source: Universities UK (2020)

> **Canada Emergency Student Benefit and national student grant increases:** This programme provides financial support to post-secondary students and recent high school graduates who are unable to find work due to the COVID-19 pandemic over the summer of 2020. The government has also announced plans to double student grants and broaden the eligibility for financial assistance, as well as additional support in the form of scholarship funding extensions for students and postdoctoral researchers impacted by the COVID-19 pandemic.
>
> Source: OECD (2020)

## Short-term impact of COVID-19 pandemic on the social dimension of higher education

There is still limited research on how the COVID-19 pandemic may have impacted the intentions of prospective students from underrepresented, disadvantaged and vulnerable groups to enrol in higher education. However, some surveys and studies carried out in the UK, France and the United States provide invaluable insights on some of the emerging trends.

### *Potential impact on access of students from underrepresented, disadvantaged and vulnerable groups*

In the UK, a survey by the Sutton Trust (Montacute and Holt-White, 2020) showed that university applicants from working-class backgrounds were:

- twice as likely to have insufficient access to the internet, devices for learning or a suitable place to study, compared to those from middle class homes.
- more likely to be worried about the negative impact of the COVID-19 pandemic in terms of getting into their university of choice (51 %) compared to middle class applicants (43 %).
- more likely to have changed their mind about attending university than more advantaged applicants.

In France, the national rectors' conference (the Conference of University Presidents – CPU) issued a statement expressing their concern on how the recent response in autumn 2020 to move all classes online would affect the most disadvantaged students who would risk permanently dropping out of higher education. The statement also reflected on how national measures closed down most schools and universities, with the exception of preparatory classes in secondary schools for the *grandes écoles*, which the CPU underlined as being fundamentally inequitable and unfair since it places learners from higher socioeconomic backgrounds at a further advantage (CPU, 2020).

Similar concerns on the impact of COVID-19 on access to higher education exist in the United States, where a survey of higher education leaders by Inside Higher Ed (2020) revealed that leaders of two-year colleges (that have higher proportions of disadvantaged students) are much more concerned about the equity implications of the COVID-19 pandemic than leaders of four-year institutions. Responding to the question of how challenging would it be for their students to move to online or remote teaching, 85 % of leaders of two-year colleges considered this would be challenging for ensuring access of new students (compared to 63-68 % of four-year institutions) and 91 % considered that their students would have challenges regarding the accessibility of online learning platforms (compared to 69-76 % of four-year institutions). These concerns have since been confirmed in practice. Emerging data on undergraduate enrolment have shown a drop of 13 % compared to the same time last year, with community colleges showing the steepest decline (-18.9 %), which is almost 19 times the pre-COVID loss rate (National Student Clearinghouse Research Center, 2020). According to the same dataset, inequalities of access can be identified for specific underrepresented, disadvantaged or vulnerable groups, with Black students facing the sharpest decline in undergraduate programmes (an overall drop of 8 %, and a drop of 11 % at community colleges).

*Potential impact on drop-out of students from underrepresented, disadvantaged and vulnerable groups*

Regarding the risk of disengagement and drop-out among students who have successfully enrolled during the 2020/2021 academic year, a survey carried out in the UK by Wonkhe (2020) provides a rare example of recent surveys specifically covering this topic. Carried out at the start of the 2020/2021 academic year, the survey (which covered over 7 000 students from 121 institutions) revealed that a significant proportion of students are considering dropping out (12.6 %), rising to around one in five among disabled students and students from state schools. The survey provides worrying findings regarding overall student well-being and mental health, with over half of the survey sample reporting feeling lonely on a daily or weekly basis. The risk of dropping out was much higher for students who had lower levels of satisfaction with their student experience: compared to the average of 12.6 % of students considering dropping out, the rate was 31.5 % for students who felt lonely and isolated, 29.3 % for students dissatisfied with the quality of their academic environment and 26.3 % for students who were dissatisfied with the quality of their social life at university.

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**Box 3.3. COVID-19 responses: illustrations of good practice**
*Belgium: KU Leuven holistic approach to supporting students during COVID-19*

KU Leuven has undertaken a range of measures to address various aspects of well-being of its students faced by exceptional circumstances caused by COVID-19 in the current 2020/2021 academic year.

The university has expanded its existing support for students, developing online sessions on mental well-being, on themes such as worrying, addiction, the body (sleep, breathing, moving and listening), supporting each other, stress and self-care. More than 400 students have already participated in one of these sessions this academic year. In addition, psychologists of the Student Health Centre, together with KU Leuven's main student organisations (LOKO and STURA), provide an online resilience training for students. Students also have the opportunity to use an accessible and anonymous online chat organised three times a week by KU Leuven student support staff, which has been used by more than 380 students since the start of the academic year.

In terms of logistical and material support, students experiencing hardship and international students who are new to KU Leuven can use designated study places in libraries and learning centres on the different campuses of the university. For students who have lost their student job and therefore find themselves facing difficulties in paying for their studies, an emergency subsidy regulation has been launched and students can contact a specialised student office for advice about their financial concerns.

In addition to academic, psychological and financial support, KU Leuven also actively facilitates informal social networking between students. The online community 'MindMates chillzone' provides a platform that connects people based on common interests and which has already attracted 500 students.

For international students, a tailor-made English-language support on mental well-being is provided and the intercultural meeting centre 'Pangea' provides a platform for online conversation groups, informal coffee breaks moments and meditation sessions.

Source: KU Leuven (2020)

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## Medium-term impact of COVID-19 pandemic on the social dimension of higher education

Looking at the social dimension of higher education in a medium-term perspective means considering how the COVID-19 pandemic will impact educational inequality in pre-tertiary education, creating a knock-on effect of reducing equal opportunities of access to higher education in the years to come. At the international level, widespread concern has been

expressed about the disruption caused by the COVID-19 pandemic in the area of education, and especially on the detrimental effect it will have on learners from disadvantaged backgrounds at all levels of education. At the pre-tertiary level, intergovernmental institutions and other transnational organisations have warned about the risks of educational inequality:

- the United Nations (2020b) noted that at the global level the 'crisis is exacerbating pre-existing education disparities by reducing the opportunities for many of the most vulnerable children, youth, and adults – those living in poor or rural areas, girls, refugees, persons with disabilities and forcibly displaced persons – to continue their learning' and that increased drop out from education can be anticipated.
- The G20 Education Ministers' Statement on COVID-19 (2020) noted that the widespread disruptions in education and training that have resulted from the COVID-19 pandemic disproportionally affect underrepresented, disadvantaged and vulnerable groups and particular demographics, including women and young people, and that there is a need to address the 'digital divides and inequities that occur in learning opportunities'.
- The OECD (2020) notes that learners from lower socioeconomic backgrounds and difficult family situations in OECD countries are likely to have inadequate access to learning resources, resulting in learning losses for those groups. However, the OECD notes that an even greater problem than learning losses (which may only be temporary) could be disengagement of some students from the school system and loss of educational aspirations, which would have longer term effects in deepening educational inequality.
- The European Centre for the Development of Vocational Training (CEDEFOP, 2020) published a paper on the digital gap for learners at risk in vocational education and training in Europe, warning about the risks of exclusion of underrepresented, disadvantaged and vulnerable learners from distance learning, which in turn could lead them to drop out from their programmes.

Emerging research is confirming these concerns. The European Commission's Joint Research Centre (Di Petro et al., 2020) published a synthesis of existing literature and international data sets demonstrating that the switch to online learning is expected to exacerbate existing educational inequalities due to lack of access to learning resources, lack of a suitable home learning environment and insufficient support from parents. Students from less advantaged backgrounds are also more likely to face greater challenges regarding their emotional well-being and motivation due to their exposure to more stressful home environments, compounded by the likely financial and job-security concerns of their parents.

These concerns have been further confirmed in national contexts by surveys carried out during the COVID-19 pandemic. A survey in the UK by the Sutton Trust (2020) found that children in higher-income homes had more access to study space, computers and internet connectivity, and that children living in low-income (often overcrowded) homes were more likely to experience stress that interferes with emotional health and learning. A further finding of the survey is that children from better-off households were more than twice as likely to have spent at least GBP100/EUR100 on private tutoring during the COVID-19 lockdown periods than lower-income families.

In the longer term, the expected deterioration of educational inequality in pre-tertiary education will have a direct effect on lowering the level of participation of underrepresented, disadvantaged and vulnerable groups in higher education. According to Major and Machin (2020), referring to the situation in the UK, there are serious concerns that the COVID–19 pandemic will have long-term 'scarring' effects for young people under the age of 25 – the 'COVID generation' – resulting in an unprecedented decline in social mobility due to rising economic and educational inequalities.

However, although there are serious risks facing the social dimension of higher education in the long term due to COVID-19, it is important to also consider what opportunities that the crisis provides for addressing challenges faced by higher education systems. From that perspective, the authors of this report would encourage the view echoed in reports such as those of the World Bank (2020a) and YERUN (2020) that COVID-19 provides an opportunity to place the inclusion of underrepresented, vulnerable and disadvantage groups as a top priority in the efforts to address the disruption caused by COVID-19, and thereby directly contribute to the new goal of creating a socially inclusive European Higher Education Area in the upcoming decade, as defined in the Rome Ministerial Communiqué (2020).

The above overview has shown that additional research and analysis will be needed to better understand the current and future impact of COVID-19 on the social dimension of higher education, particularly through collecting, monitoring and analysing trends related to:

- enrolment in higher education, particularly related to the enrolment of underrepresented, disadvantaged and vulnerable students;

- the transition time between leaving the regular school system and entry into higher education, particularly taking into account the educational background of students;

- how higher education is entered: alternative access routes vs standard access route;

- drop-out, duration of studies, and completion in higher education, particularly for the above groups of students;

- demand for various modes of study: part-time studies and short-term programmes vs full-time study.

- the existence of strategies and action plans for mitigating negative consequences caused by the COVID-19 pandemic in the higher education system and on the institutional level, particularly for strengthening the social dimension.

- the existence of special funds for mitigating negative consequences caused by the COVID-19 pandemic in higher education, but also on other education levels.

- community engagement activities between higher education institutions and their local communities to address pressing societal needs.

## Policy implications and recommendations

Evidence emerging from surveys and research at the global level confirm the concern expressed by intergovernmental and transnational organisations about the negative impact that the COVID-19 pandemic could have on underrepresented, disadvantaged and vulnerable students in higher education (and on those wishing to enrol in higher education in the future). As noted by the United Nations (2020b) policy brief, it is important to emphasise the fact that the 'crisis is exacerbating pre-existing education disparities' rather than causing those disparities. What the findings of the emerging COVID-19 surveys tell us is that the underrepresented, disadvantaged and vulnerable groups now face a range of *additional* challenges in accessing higher education, participating fully in their study programmes and successfully completing their studies.

Ultimately, each public authority and higher education institution must adopt context-specific interventions to address the challenges for social dimension caused by the COVID-19 pandemic, since their challenges and needs differ depending on the context in which they operate. In the following table, however, we provide a summary list of general policy recommendations based on the surveys and literature reviewed in this chapter. These recommendations apply in both the short and medium term, in order to ensure equitable educational opportunities not only in the context of the COVID-19 pandemic, but also in

its aftermath, with the broader aim of ensuring more socially mobile, cohesive and prosperous societies.

| Level of intervention | Policy recommendation | Source |
|---|---|---|
| **SYSTEM LEVEL** | | |
| **Strategy and planning** | Create strategies and action plans to mitigate negative consequences caused by the COVID-19 pandemic in higher education (HE), with special focus on strengthening the social dimension of HE. | World Bank (2020) |
| | Legal regulations and administrative rules should allow sufficient flexibility for higher education institutions (HEI) to create appropriate solutions to cope with COVID-19 circumstances. | Rome Communiqué (2020) |
| | Collect, process, and use data that will help understand the impact of the COVID-19 pandemic on the social dimension of HE. | Authors (see the chapter on long-term impact above) |
| **Supporting measures** | Address structural issues of the digital divide between countries and within countries (bandwidth, server hosting/data storage). | World Bank (2020) |
| | Secure access to reliable, suitable and affordable internet connection for all students. | Authors |
| | Support professional training for academic and administrative staff at HEIs on how to replace on-site teaching with online delivery: Create cooperative national structures, facilitate peer learning and inter-institutional staff development. | Doolan et al. (2020); Authors |
| | Provide additional financial support for HEIs and students to mitigate negative consequences caused by the COVID-19 pandemic. | Doolan et al. (2020); Montacute and Holt-White (2020) |
| **HIGHER EDUCATION INSTITUTION LEVEL** | | |
| **University management** | Create institutional strategies and action plans to mitigate negative consequences of the COVID-19 pandemic, with special focus on strengthening the social dimension of HE. | Authors |
| | Increase flexibility of university policies in the design, organisation and delivery of study programmes (e.g. allowing students to easily adjust their course load, timing of assignments), in alternative access routes, etc. | Aucejo et al. (2020) |
| | Increase flexibility of HEI's financial policies, e.g. allowing students to defer tuition payments if they are unable to pay due to the COVID-19 pandemic, or cancelling tuition fees for students who can demonstrate to be negatively affected by the pandemic. | Aucejo et al. (2020); Authors |
| | Allocate more resources, reduce barriers, and increase communications for a potential increase in students' requests for mental health services, including counselling or therapeutic services, in the 2020/2021 academic year. | Chirikov et al. (2020) |

| | | |
|---|---|---|
| | Provide additional university-level financial support for at-risk students to access equipment, internet services, and to improve their digital skills. | Doolan et al. (2020) |
| | | Montacute and Holt-White (2020) |
| | Assess adequacy of financial and material support for at-risk students and institutions. | World Bank (2020) |
| | Survey students on their capacity to engage in remote learning (equipment, family responsibilities, home environment, etc.) and on student welfare, and make adaptations to address emerging needs. | World Bank (2020) |
| **Support services** | Ensure accessible and user-friendly counselling and guidance for students and staff to find appropriate solutions for academic, health, and career challenges caused by the COVID-19 pandemic. | Authors, based on Doolan et al. (2020) and Wonkhe (2020) |
| | Develop and implement programmes to keep at-risk students engaged, including dedicated tutors, point persons, and customised work programmes or schedules. | World Bank (2020) |
| | Facilitate the development of peer-based social support networks among students and staff, particularly helping the underrepresented, disadvantaged, and vulnerable. | Authors, based on Doolan et al. (2020) and Wonkhe (2020) |
| | Provide appropriate training to all students and to teaching and administrative staff to build digital competencies which allows them to study and work in an online environment and to better understand social dimension principles. | World Bank (2020); Authors |
| | Work alongside student organisations to develop interventions, create proactive programmes, and expand existing services for student welfare. | Chirikov et al. (2020) |
| **Teaching and learning** | Provide students with a more flexible assignment schedule to allow them to adapt to changes in their work schedule or family commitments due to the COVID-19 pandemic. | Aucejo et al. (2020) |
| | Recognise the risks of lower engagement or achievement among students with mental health challenges. | Chirikov et al. (2020) |
| | Allow underrepresented, disadvantaged, and vulnerable students to switch between online and in-person classes to adapt to their specific housing, work, and health situation. | Aucejo et al. (2020) |

# 4. Impact of COVID-19 on international student mobility

## Background: international student mobility pre-COVID-19

Mobility and internationalisation in higher education have been a central feature of European Union policies for higher education and within the Bologna Process. Learning mobility in higher education was one of the seven benchmarks of the EU's strategic

framework for European cooperation in education and training (EC, 2009). According to the benchmark, 'at least 20 % of higher education students should have had a period of higher education-related study or training (including work placements) abroad, representing a minimum of 15 ECTS credits or lasting a minimum of three months'. In the European Commission's latest communication *Achieving the European Education Area by 2025* (European Commission, 2020), learning mobility and exchanges are featured prominently under the broader objective of achieving 'seamless and ambitious transnational cooperation between higher education institutions'. This objective will be supported through a range of measures, such as by strengthening the Erasmus+ programme (including through making enhanced mobility one of the objectives of the recently launched European Universities Initiative) and through the upcoming European Student Card Initiative.

According to the OECD (2020), international student mobility at the global level has expanded consistently over the past two decades, with 5.6 million students worldwide having crossed a border to study in 2018. The number of international students worldwide has grown on average by 4.8 % per year since 1998, and the figure doubled between 2005 and 2018.

What proportion of students in Europe were internationally mobile before the COVID-19 pandemic? According to estimates by the European Commission (European Commission, 2020), the proportion of higher education graduates that have experienced learning mobility in 2018 was 13.5 %, which although below the ET2020 benchmark of 20 %, is considered as an underestimation due to limited data availability. Using a wider definition of international learning mobility (including language courses, summer schools and other study-related experiences), data from the EUROSTUDENT survey (2019) show that as many as 20 % of surveyed students had an experience of international learning mobility. Additional data from the OECD (2020) provides other interesting insights into other student mobility trends in Europe: 80 % of European mobile students study in another European country and in countries such as Austria, Denmark, Luxembourg, Poland, Portugal, the Slovak Republic and Slovenia at least 80 % of all international students come from other European countries.

Since international travel has been one of the areas worst affected by the COVID-19 pandemic due to travel restrictions and health concerns (UNWTO, 2020), there have been immediate and drastic effects on learning mobility in higher education. The ongoing nature of the pandemic also brings up a range of difficult questions about the medium- and long-term impacts on mobility in higher education.

## Immediate impact of COVID-19 on student mobility (2019/2020)

A summary of the immediate challenges faced by international students after campuses shifted to online learning is summarised in a document published by the American College Health Association (ACHA, 2020). Although based on experiences at US universities, the document highlights issues that have undoubtedly been experienced by international students worldwide and are thus equally applicable to the European context. According to ACHA, international students can be considered as one of the 'vulnerable populations' on US university campuses during the COVID-19 pandemic due to the following challenges they faced:

- **Challenges faced by international students who were unable to return to their home countries:** Students unable to return to their home countries due to travel restrictions, had to apply to remain in campus housing or look for off-campus accommodation in difficult circumstances. Remaining international students were also at higher risk of isolation, particularly during lockdown phases of the pandemic. At the same time, they are likely to have been reluctant to seek counselling or mental health care, as suggested by previous research on international students (see Hyun et al.,

2007). Additionally, factors such as inadequate proficiency in the local language or not knowing where to seek help may have presented additional challenges for international students during the pandemic.

- **Challenges faced by international students who succeeded in returning to their home countries:** This group of students may have undergone a different set of challenges related to the emergency remote teaching that was provided by their institutions. Aside from the disadvantages of studying in a learning environment with much lower levels of interaction with peers, students from certain geographical regions may have experienced challenges due to large time zone differences, inadequate internet access, and (in some countries) potential censorship of classroom discussions. Additionally, students from countries requiring visas and residence permits may have faced uncertainty and challenges regarding whether they would be allowed to return to campus in the winter semester, due to travel or entry restrictions.

A number of surveys carried out during the COVID-19 pandemic have focused specifically on the experiences of international students during the pandemic and on the responses of higher education institutions. International surveys of higher education institutions that included a focus on student mobility were carried out by the European Association for International Education (Rumbley, 2020) and the International Association of Universities (Marinoni et al., 2020), while national surveys were carried out in Germany (Kercher and Plasa, 2020), the UK (Universities UK, 2020) and the USA (Martel, 2020). Other surveys focusing on the experiences and expectations of international students were carried out at the transnational level by Erasmus Student Network (Gabriels and Benke-Aberg, 2020) and by the European Commission's DG Education, Youth, Sport and Culture (European Commission DE EAC, 2020), as well as by the QS World University Rankings (QS 2020a; QS, 2020b). Finally, the European Migration Network and OECD (EMN/OECD, 2020) identified challenges faced by international students from countries that require visas and/or residence permits to study in the European Union. The following sections will synthesise the main findings of those surveys regarding the short-term impact of COVID-19 on student mobility in the 2019/2020 academic year.

### *Cancellations/delays to mobility*

According to data of the IAU (Marinoni et al., 2020) focusing on European higher education institutions, 77 % of institutions cancelled at least some of their international mobility schemes as a consequence of COVID-19, with 30 % answering that all mobilities were cancelled, and 47 % answering that mobility was cancelled with certain countries. According to the ESN (Gabriels and Benke-Aberg, 2020) survey, 25 % of students noted that their mobilities were cancelled. Additionally, according to IAU, 53 % of higher education institutions answered that international students were grounded at their institutions; according to ESN, 43 % of their students were grounded at foreign institutions. The European Commission survey (EC, 2020) finding is identical to the ESN survey: 25 % of students had their mobility cancelled. However, 55 % of students continued their mobility with alternative arrangement (virtual activities), while for the rest of the respondents the activity was temporarily suspended.

Regarding national-level developments, the findings from the DAAD survey in Germany (Kercher and Plasa, 2020) confirm these European trends. In the summer semester of the 2019/2020 academic year, 52 % discontinued some or all of their exchange programmes, and nearly two thirds (65 %) of the universities reported that students had cancelled their planned stays abroad during the summer semester. Data for the United States (Martel, 2020) show similar trends: 90 % of surveyed universities offered students to defer their enrolments to future semesters (either in summer 2020, winter 2020 or beyond), while 4 % offered refunds. However, 78 % of surveyed institutions also offered international students the option to switch to online learning instead of physical mobility.

### *'Virtual mobility' as immediate response*

As noted in the previous chapter on teaching and learning, 85 % of responding higher education institutions (Marinoni et al., 2020) and 85 % of responding international students (Gabriels and Benke-Aberg, 2020) noted that classes had been replaced by online teaching, either totally or partially. To provide some national examples, in Germany 92 % of universities had adapted their learning environments due to COVID-19, with 47 % switching to virtual teaching only and 45 % with a blended model (Kercher and Plasa, 2020). In the United States, as previously mentioned, 78 % of surveyed institutions offered international students to switch to online learning (Martel, 2020).

### *Additional support to international students*

Virtually all institutions responding to the IAU survey (Marinoni et al., 2020) had set up communication channels with international students about the response to the pandemic and provided them with additional support. The surveys from Germany and the United States reflect similar findings: 92 % of surveyed institutions from Germany had assisted their own students to return from abroad (Kercher and Plasa, 2020). In the United States, more than half of the surveyed institutions provided financial and logistical support to students returning to the United States, and more than 80 % of institutions provided increased support to international students on their campuses regarding safety, well-being and visa questions (Martel, 2020).

However, the ESN (Gabriels and Benke-Aberg, 2020) survey provides a different perspective on these findings. While international students in Europe (including both EU nationals and non-EU-nationals) were broadly satisfied with the support they received from their institutions, certain gaps were identified: the availability of information on health measures was deemed as being positive by 78 % of students, while the availability of information on travel restrictions was deemed as being positive by only 65 % of students – which shows that between a third and a quarter of students were not satisfied with the quality of communication about health- and travel-related matters during the pandemic.

Another interesting finding of the IAU survey (Marinoni et al., 2020) identifies another area in need of improvement. Namely, almost a quarter of higher education institutions (23 %) indicated that they had no contingency plans for dealing with international students in the crisis, 34 % had contingency plans at their own universities (but not at their partner universities), while 42 % stated that both their own institutions and partner institutions abroad had contingency plans in place. The view of the students in this area is significant: only 58 % students identified their host university when asked who supported them during the pandemic and only 44.6 % identified their home university (Gabriels and Benke-Aberg, 2020).

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**Box 4.1: COVID-19 responses: illustrations of good practice**

***Local initiatives to support international students***

According to EMN-OECD (2020), nine EU Member States and Norway implemented support mechanisms for international students at the local level, including through some of the following initiatives by local universities:

- **Belgium:** an NGO in Ghent ("*Ontmoeting Buitenlandse Studenten Gent"* / Meeting Foreign Students Ghent) provided financial aid to students coming from the Global South and organised a food bank for international students.

- **France:** the University of Paris provided international students with emergency aid and other types of aid, for example, by donating computers.

- **Norway:** the University of Oslo and other Norwegian universities offered financial aid to international students who had lost their job and/or wages due to COVID-19 and who did not have sufficient funds to return to their home countries.

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- **Sweden:** Lund University facilitated the use of private donations to support international students who found themselves in hardship due to COVID-19, with priority given to students unable to return to their home countries due to the pandemic.

Source: EMN- OECD (2020)

### *Overall assessment of university responses*

The IAU (Marinoni et al., 2020) and ESN (Gabriels and Benke-Aberg, 2020) surveys show that, overall, the responses of universities and their students regarding the impacts of the COVID-19 pandemic are well aligned and that while some improvements could be made universities were perceived by the majority of respondents as having reacted quickly, responsibly and proactively to the disruption caused by the COVID-19 pandemic. The European Commission (2020) survey confirms this finding, with more than 80 % of respondents being satisfied with the support they received from various institutions (e.g. from their host/home universities or from other local organisations). The European Commission's survey also provides a valuable additional insight into the level of satisfaction of international students with the online learning environment during the pandemic. A large majority of respondents agreed that the digital learning tools and platforms worked very well (71 %) and that moderators, professors, trainers and organisers ran the activities well (71 %). However, compared to physical mobility activities, a large majority of surveyed participants (81 %) missed face-to-face interaction and missed access to facilities and resources such as libraries (69 %).

## Specific challenges for third country students: visas and residence permits

In the context of the European Union, 'third countries' refer to countries that are not members of the EU or other countries/territories whose citizens enjoy the right to free movement. According to a study by the European Migration Network (EMN, 2019), attracting third country students is seen as a high priority for almost half of all Member States since those students are considered important for future investment, economic growth and innovation. In 2017, the highest number of international students in Europe came from China, the United States and India and the most popular destinations for students from third countries were the UK, France and Germany.

Third country students requiring visas or other forms of residence permits encountered a range of specific challenges regarding their status during the COVID-19 pandemic. A recent joint study by the European Migration Network and the OECD (EMN/OECD, 2020) identified the following challenges and EU Members State responses in the course of 2020:

### *Delays in the application procedure for visas or residence permits for international students*

Twenty-four EU Member States declared that they experienced such delays between March and June 2020 due to COVID-19, and several countries adopted measures in order to mitigate the negative effects produced by these delays, such as extending deadlines, providing online admission procedures for immigration, online renewal of residence permits, or priority status for processing the applications of international students in order to ensure that they could meet admission deadlines.

### *Risk of existing permits not being granted or being withdrawn*

Several EU Member States set up specific measures to protect international students against withdrawal of residence permits as a consequence of delays, interruptions or prolongations of their studies due to COVID-19 – including for first applicants, for students already on the territory or for students who had to return to their home country. For example, flexibility was provided regarding certain criteria (e.g. application deadlines; proof of the education programme involving face-to-face teaching; proof of subsistence; etc.)

> **Box 4.2: COVID-19 responses: illustrations of good practice**
>
> *Ireland: Automatic extension of student*
>
> *residence permits and online registration renewal*
>
> In Ireland, all residence permits that expired between 20 March 2020 and 20 July 2020 (including those of students) were automatically extended for a period of two months, on the same conditions as the original permission.
>
> In June 2020, the Irish Department of Justice and Equality's Immigration Service Delivery launched an online registration system for residence permits for all third country students renewing permission for the coming academic year and who were residing in Dublin (students living outside Dublin could renew their registrations at local registration offices). Under the online system, students could submit their application, supporting documentation and pay the fee, and send their original passport and original Irish Residence Permit card via registered post for verification.
>
> Source: EMN-OECD (2020)

### *Obstacles to working part-time while studying*

Many international students rely on part-time work to help finance their studies, which the COVID-19 pandemic severely affected due to large-scale job losses. Some countries reported that they adjusted the working time for international students to engage in paid employment to address the impacts of the pandemic (e.g. in Belgium, France, Ireland and the UK). Namely, according to the Students and Researchers Directive, there are limits on the number of hours per week that third country students are allowed to work during their studies. The countries above therefore increased the maximum working time to allow for third country students to better cope with the pandemic.

### *Financial obstacles*

Six EU Member States reported that they had set up special programmes to provide emergency funding to disadvantaged students, including international students, negatively affected by the COVID-19 pandemic (see Chapter 3 'Impact of COVID-19 on the social dimension of higher education' for a description of these schemes).

## Short-term impact of COVID-19 on student mobility (2020/2021)

The question of how the COVID-19 pandemic is affecting European higher education at the start of the current 2020/2021 academic year is a crucial one, but there is as yet little data on what the impact on institutions and mobile students has been. What the findings of surveys carried out in 2020 can tell us, however, is what higher education institutions and students considered would be the *likely* impact on their international mobility plans at the start of the 2020/2021 academic year. The relevant findings of these views can be summarised as follows.

### *Anticipated decrease of international enrolments*

Many higher education institutions in Europe surveyed in the months before July 2020 expressed uncertainty about their international student enrolment policies in the 2020/2021 academic year, and most forecast a major decrease of international student enrolment. According to data by EMN-OECD (2020), six EU Member States[16] and Norway reported to have noticed a negative impact of the pandemic on the numbers of international students from third countries wishing to enrol (based on student visa applications), although six other EU Member States[17] did not observe such a negative trend. Other

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[16] Belgium, Lithuania, the Netherlands, Portugal, Spain and Sweden.
[17] Cyprus, Finland, France, Greece, Malta and Slovakia.

national-level studies and reports, suggest that a decrease in international students is also anticipated in other EU Member States. In Germany, more than half of the universities (57 %) anticipate a decline in interest among international students in the 2020/21 winter semester, and 49 % expected a decrease in the international mobility of their own students in the same semester (Kercher and Plasa, 2020). In the UK, 77 % of surveyed universities were considering postponing mobility to the second semester of 2020/2021 and 62 % of respondents were considering postponing all mobility to the academic year 2021/2022 (Universities UK, 2020).

These concerns are reflected worldwide. In the US, the American Council on Education estimated in April 2020 that enrolments for the next academic year would drop by 15 %, including a 25 % decline in the number of international students (ACE, April 9, 2020). According to a survey of US universities by IIE (Martel, 2020a), 88 % of surveyed universities anticipate that international student enrolment will decrease in the 2020/21 academic year.

The anticipated decline in student interest or readiness to be internationally mobile during the COVID-19 pandemic is confirmed by a survey on the intentions of prospective international students worldwide carried out by QS World University Rankings (QS, 2020.a) in May 2020. On average, 64 % of students responded that their mobility plans had been affected by the COVID-19 pandemic, and 56 % of students intended to defer their entry to their university of choice. Only a small proportion decided to cancel their mobility altogether (4 % to 7 %, depending on field of study) or study in a different country (7% to 11%, depending on field of study). The findings of a separate QS survey focusing on differences by study level (QS, 2020b) show that graduate students are more likely to wish to defer their studies (64 %) than undergraduate students (48 %). Another US-based student survey carried out by World Education Services (WES, 2020) indicated similar trends among international students applying to study in the US: in August 2020, more than half of all prospective international students claimed that the pandemic would not have an impact on their intent to enrol at US institutions, while among those whose plans were affected, most prospective students considered the option of delaying enrolment (63 % of students in August 2020, which is an increase compared to the 52 % of international students considering delay as an option in June 2020).

The latest emerging data at the time of writing this report suggested that these estimated decreases in international student enrolments were confirmed in practice in many countries at the start of the 2020/2021 academic year. Germany saw a drop of 20 % in the number of international students (Gardner, 2020), while the US saw a drop of 16 % in overall international student enrolments, with the drop in new student enrolments at 43 % (Marklein, 2020). In Australia, applications for student visas in Australia have 'collapsed' and are approximately 80–90 % below what they were at the same time in 2019 (Hurley, 2020). However, the emerging picture is not a straightforward one, since data suggest that the UK has actually seen an increase of 9 % in the number of international students in this academic year (UCAS, 2020) and Sweden has also seen an increase of 13 % in international enrolments (Myklebust, 2020). It is too early yet to determine what the possible reasons for such different (preliminary) outcomes could be.

### *Switching to virtual mobility or blended mobility*

In line with the findings of the previous chapters, online learning and possibly hybrid or blended approaches, are being considered by most universities as a medium-term response to the effect of COVID-19, including for international students. In the UK, 62 % of surveyed universities were considering blended mobility by starting programmes online (Universities UK, 2020). In the US, 52 % of surveyed universities indicated that they planned to offer students online learning during the whole winter semester, while 42 % indicated that they would offer online learning until the students can attend classes in-person on-campus (Martel, 2020a).

In this context, it is useful to consider the findings of surveys that have explored the views of students regarding their acceptance of (or resistance to) the prospect of replacing international mobility with virtual mobility. The European Commission (2020) survey of Erasmus+ mobile learners indicates, as can be expected, that the preference of learners is to experience physical mobility:

- 55 % of respondents would prefer to postpone the start of the mobility until the situation returns to normal;
- 31 % of respondents would prefer to start their mobility as virtual learning and then use the opportunity for an experience abroad;
- 9 % of participants would opt for cancelling the mobility period;
- only 5 % would be ready to replace physical mobility entirely by virtual activities if there is no other alternative;

However, the same survey notes that participants who had already taken part in virtual mobility periods are more acceptive of the blended mobility scenario: such students express the highest preference (44 %) for starting their mobility as virtual learning. The findings of another QS survey on the plans of international students in the 2020/2021 academic year (QS, 2020c) confirms that online learning is no longer as strong a deterrent as it may have been previously and that students are increasingly willing to adopt online learning or blended learning practices: 75 % of prospective students would be interested in starting their studies online if they knew that it would only be for a period of up to three months until face-to-face classes could commence; 64 % of respondents would be still interested in starting their studies online if they knew that it would be for a duration of up to six months. At the same time, however, another interesting finding of the QS survey is that as the COVID-19 progressed (from March to June 2020) students expressed a greater interest in socially distanced, face-to-face learning than online learning. Whereas in March 2020, 61 % of students supported moving lectures online and only 33 % supported face-to-face classes in a socially distanced environment, by June 2020 the answers were the opposite: only 33 % of students supported online learning whereas 61 % supported face-to-face learning in an adapted environment.

### *Third country students: Admissions and visa/residence challenges and open questions*

According to EMN-OECD (2020), universities wishing to enrol third country students face two potential challenges. Firstly, admissions for new international students are affected by closures of consulates and visa offices, as well as by health considerations. Secondly, the open questions faced by countries wishing to enrol international students is whether those students that are admitted but that only follow the courses online (due to the COVID-19 pandemic) should be eligible for visas and residence permits. Prior to the COVID-19 pandemic, most study programmes provided online did not allow students from third countries to apply for visas or residence permits. However, as online learning becomes the new normal, countries will now need to re-assess how to admit international students for such studies and under what conditions. Countries such as Finland, the UK, Australia and Israel have made some provisions allowing flexibility for students enrolled in distance learning courses to also claim student visas and residence permits to follow fully online courses in the countries where they are provided. Other countries such as Germany or the US, however, did not provide such an option and such policies have been met with opposition by some stakeholders within the higher education system (Redden, 2020; Gardner, 2020). Such policies are likely to play an important role in steering students' decisions to enrol in study programmes in specific countries offering such flexibility.

## Medium-term impact of mobility disruptions for higher education systems (2021-2025)

The uncertainty regarding how long the COVID-19 pandemic will last means that higher education systems, their institutions and their current and prospective students face a number of difficult questions about the long-term impact of this state of affairs on the possibility of international mobility in higher education.

### *Quality and value of virtual mobility*

If universities are forced to limit international student mobility and offer virtual (or at least blended) alternatives, the key question will be how universities can ensure added-value for international students, compensate for the loss of physical interaction and expose them to the intercultural skills that would usually have emerged as a part of international mobility (Hudzik, 2020).

### *Financial value of virtual mobility – tuition fees*

Linked to the previous point about the value of virtual learning, the vast majority of respondents of the QS (2020) survey (78 %) stated that moving studies for international students to virtual learning environments should result in lowering tuition fees, which confirms the importance of on-campus experiences for international students. For those that believe tuition fees should be discounted, it seems that most respondents are expecting a 20-40 % reduction.

### *Financial impact on universities and higher education systems*

According to OECD (2020), the combined problems of obstacles to international mobility, the switch to online learning and students' perception of the value of their degree, could all have 'dire consequences for international student mobility in the coming years' (p. 231). The countries most likely to be affected are those that both have the most international students at the global level and that also charge significant tuition fees (e.g. the US, the UK, Australia, New Zealand among others). Indeed, the American Council on Education projected a decline of 25 % in international student enrolments, resulting in a revenue loss for universities of USD 23 billion (ACE, April 9, 2020). Universities Australia (2020) made similar projections of revenue losses of between AUD 3.1 billion and AUD 4.8 billion due to the drop in international student numbers.

Europe as a whole is still considered to have higher education systems with relatively high levels of public funding and relatively low levels of tuition (OECD, 2020). Nevertheless, countries such as the UK have calculated that a worst-case scenario of having no tuition fee income at all from international (non-EU and EU) students would result in a GBP 6.9 billion loss of income to the UK higher education sector, which could impact a range of other negative outcomes such as financial failure of certain institutions, decreased access to higher education for disadvantaged groups, and damage to local communities and economies (Universities UK, 2020b). There are no other estimations by other EU Member States in the literature reviewed. However, as emphasised in the previous paragraph – the countries that will face major financial risks are those that have both high tuition fees and high numbers of international students – a combination that is not common in most EU Member States.

### *Negative effects on broader goal of internationalisation in higher education*

Student mobility is only one aspect of internationalisation in higher education systems. According to Hudzik (2020), the COVID-19 pandemic has equally detrimental effects on cross-border research and cross- border collaborations between universities, as well as on 'campus internationalisation', that is, ensuring a more culturally diverse environment at the university. Such developments all represent a risk for internationalisation policies, structures and initiatives at universities worldwide. If internationalisation is not integrated

into core teaching, research and community engagement missions of universities, this may seriously weaken internationalisation as a priority within institutions that are under financial stress.

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**Box 4.3: COVID-19 responses: illustrations of good practice**

***European Universities Initiative: the value of international collaboration in addressing the impact of COVID-19***

In order to better understand the way European universities jointly address the common challenges brought by COVID-19 (especially in a context of transnational collaboration and international mobility), the European Commission conducted a survey in May 2020 with the 114 higher education institutions taking part in the first 17 European Universities.

The survey findings confirm that, while internationalisation and mobility are profoundly affected by COVID-19, there is undeniable value of transnational collaboration in defining innovative solutions to the crisis. The findings of the survey include the following:

- More than 60 % of higher education institutions involved in the European Universities alliances consider that being part of a European University has been helpful in addressing the challenges of COVID-19.

- Almost 80 % shared good practices and measures within their alliance relating to alleviating the impact of COVID-19. Such resources included: sharing e-learning tools and platforms; forming working groups on e-exams and e-testing; teacher training resources; joint guidance for students/online learners; support through facilities (e.g. libraries, labs); and online social activities/support.

- 59 % have started pooling online courses or MOOCs that students from all member universities can access to from the next academic semester.

- 85 % plan to move quicker towards a European virtual inter-university campus.

In conclusion, the survey highlights that being part of a close international collaboration network, such as a European University, helps institutions to better cope with the challenges of the crisis and can even help accelerate developmental processes such as deepening institutional cooperation, establishing virtual campuses and setting up blended mobility for students and staff.

Source: European Commission, DG EAC (2020.b)

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## Policy implications and recommendations

Without addressing the immense challenges on what impact COVID-19 will have on international student mobility in the long term, the short-term and medium-term challenges identified raise a number of policy implications. Responses to many of those challenges can be provided both at the higher education system level and at the level of individual higher education institutions. Based on the reviewed evidence, the policy recommendations are summarised in the table below:

| Level of intervention | Policy recommendation | Source |
|---|---|---|
| **SYSTEM LEVEL** | | |
| **Strategy and planning** | Redefine goals for a paradigm shift: use technology to blend physical and virtual learning mobility, focusing more on idea exchange and learning objectives. | Hudzik (2020) |
| | Re-assess whether more flexibility can be provided for visa and residence permit regulations for third country students enrolling in virtual mobility. | Authors, based on EMN-OECD (2020) |

| Funding | Stimulate transnational and cross-sectoral collaboration between universities, national authorities and student and youth organisations in order to overcome the impacts of the crisis. | Gabriels and Benke-Aberg (2020) |
|---|---|---|
| | Funds originally intended for physical mobility could be redirected to other uses, such as the development of 'internationalisation at home' strategies and initiatives within and across institutions and cooperation projects of all kinds to help quality implementation of online teaching and learning, assessment and their quality assurance. <br><br> Funding could be made available for the technological equipment needed to maintain strong reliable platforms for online teaching and learning. | Gatti et al. (2020) |
| | Assess the financial losses of higher education institutions due to loss of tuition fee income from international students (both from within the EU and from third countries) and consider the impact this may have on the financial stability of higher education institutions. | Authors |

| **HIGHER EDUCATION INSTITUTION LEVEL** | | |
|---|---|---|
| **University management** | Put in place support structures to allow for impact assessment and to support the recovery of international student mobility. | Gabriels and Benke-Aberg (2020) |
| | Ensure each measure taken by the institution is looked at through the lens of equity and diversity, to ensure solutions for students from less advantaged backgrounds in the emergency response offered. | Gabriels and Benke-Aberg (2020) |
| | Adopt alternatives strategies for 'internationalisation at home' (enriching on-campus learning by blending in cross-cultural elements in the home institution). | World Bank (2020), <br><br> Gatti et al. (2020); Hudzik (2020) |
| | Rethink traditional programme models in international mobility, such as learning in semester-length segments and consider developing modular learning building blocks. | Hudzik (2020) |
| **Support services** | Ensure reliable and specific information that targets international student populations, in English or a language accessible to the international student population. | Gabriels and Benke-Aberg, 2020, <br><br> ACHA (2020) |
| | Ensure that the student support available for domestic students (psychological support, logistical support, medical support, etc.) is also available for international students. | Gabriels and Benke-Aberg, 2020 |
| | Provide counselling and support for mental health and emotional support services that are available both on-campus and online. | ACHA (2020) |

| | Ensure that specific information about accommodation is available, including about students' rights when a mobility period is interrupted. | Gabriels and Benke-Aberg (2020) |
|---|---|---|
| | Identify individuals on-campus who can serve as a resource for international students and assist with financial aid, health insurance, visas, student services, and tech support. | ACHA (2020) |
| | Reduce stigma of seeking mental health care by sharing resources via the campus website and at orientation and through student groups. | ACHA (2020) |
| | Provide opportunities for international students to meet counselling and health service staff and health coaching staff.<br><br>Offer peer or professional counselling support groups for international students. | ACHA (2020) |
| | Ensure counselling and medical staff are trained to provide culturally competent care and services. | ACHA (2020) |
| **Teaching and learning** | Ensure equal access to online learning tools for students, be mindful of the diversity in student populations. | Gabriels and Benke-Aberg (2020) |
| | Develop asynchronous lectures to provide greatest time zone flexibility. | ACHA (2020) |
| | Consider incorporating internationalisation into the curriculum as a part of 'internationalisation at home'. | Hudzik (2020) |

# 5. Conclusions

The COVID-19 pandemic has already had an unprecedented impact on higher education worldwide, in virtually all aspects of its functioning, accelerating transformation that was already taking place. In particular, with regard to online learning and teaching in the academic year 2019/2020, the pandemic transformed the way teaching took place and how research was carried out, and also highlighted the importance of universities' community engagement. The pandemic had direct impact on university operations (in terms of campus closures and the shift to online learning) and on university governance, with management staff needing to take a range of emergency decisions and allow additional flexibility in many areas of activity.

This analytical report has focused on what the impact of COVID-19 has been on higher education in Europe, based on a synthesis of evidence emerging from rapid-response surveys and research carried out since the outbreak of the pandemic. While the focus of the report was on three thematic areas (teaching/learning; the social dimension; and student mobility), implications on other aspects of higher education were also mapped in the penultimate chapter of the report. The findings of the report can be summarised as follows.

## Nature and quality of emerging evidence

There is a rapidly growing knowledge base on the impact of COVID-19 on higher education. The primary source for the report were 7 institutional surveys carried out by universities

or university networks and 7 student surveys carried out by student organisations and researchers. In addition to these sources, the report referenced over 50 journal articles, opinions and media articles on the topic. While the existing literature provides a range of insights on the topic, the following limitations must be acknowledged:

- Several surveys were carried out as rapid responses in the very early stages of the pandemic (March-April 2020), meaning that they offer only preliminary and partial insights into the scale of challenges that were to be faced by universities and students by June and July 2020.

- Due to the unpredictability of the COVID-19 pandemic, many of the surveys are based on the *expectations* of institutions and students (e.g. expectations regarding learning losses, regarding plans for the 2020/2021 academic year, etc.), which may not materialise in practice.

- Some surveys, however, did use large samples and provided valuable, in-depth analyses of collected data (e.g. Doolan et al., forthcoming; Aristovnik et al., 2020).

Despite some limitations, the indisputable value of the emerging evidence is that it provides a 'snapshot' of the main challenges and areas of concern faced by both institutions and students in the 2019/2020 academic year.

Another conclusion can be drawn regarding the relevance of global-level data and analyses. While the focus of this report was on Europe, the report has drawn upon and referenced several sources that included respondents from Africa, Asia, Australia/Oceania, Europe, North America, and South America. While it is crucial to consider the specificity of different contexts, the analysis in this report have shown that the types of challenges identified in this report have been almost identical all over the world. It is therefore relevant to consider international data and analyses when considering how COVID-19 affects higher education in Europe.

## Medium-term challenges and policy implications for teaching and learning, the social dimension and mobility

For each of the three thematic areas covered in this report a number of challenges are identified, which have direct implications for policy at the higher education system level and at the level of individual higher education institutions. A summary of the findings of this report is provided below:

### *Teaching and learning*

- Overview of challenges: The sudden move to 'emergency remote teaching' by virtually all higher education institutions due to the COVID-19 pandemic was a logistical challenge, a challenge for teaching staff (to adapt their teaching methods and assessment to online delivery) and for students (to both access course content and to successfully deal with their study workload in radically different circumstances). Although the overall assessment of emergency remote teaching was positive based on the surveys analysed, the challenges posed by online learning in the medium term (i.e. in the academic year 2020/2021) are both numerous and significant. Some of these questions include: how to ensure the quality of online learning? How to support both teaching staff and students in being better prepared for online teaching/learning? How to avoid the risk of disengagement and drop-out of students who face difficulties in the online learning environment?

- Overview of policy implications: At the higher education system level, public authorities should support higher education institutions to upgrade and redesign their curricula for online delivery and ensure that higher education institutions have the necessary infrastructure for such delivery. At the higher education institution level, support should be provided both to academic staff and students to better

adapt teaching/learning in an online environment; and more flexibility should be ensured to enable students to successfully achieve their learning outcomes (e.g. for students from disadvantaged groups and international students).

### *Social dimension of higher education*

- Overview of challenges: The evidence reviewed in the report has shown that underrepresented, vulnerable and disadvantaged groups were disproportionately affected by the impact of COVID-19 on higher education, in terms of perceived learning losses, financial concerns and lower levels of mental health and well-being. In turn, students with lower levels of mental health and well-being have been shown to face a greater risk of drop-out. Finally, the effects of COVID-19 on deteriorating educational equality in pre-tertiary education are likely to have a direct effect on lowering the level of participation of disadvantaged groups in higher education.

- Overview of policy implications: At the higher education system level, public authorities should place the social dimension of higher education as a horizontal priority in its strategies to address the impact of COVID-19 on higher education. System-level schemes should be set up to further support access, retention and completion of underrepresented, vulnerable and disadvantaged groups in higher education. At the higher education institution level, additional support should be provided to students from these groups in terms of academic, psychological and financial support in order to prevent their disengagement and drop-out.

### *International student mobility*

- Overview of challenges: Since the COVID-19 pandemic effectively brought international travel to a stop, the impact on international student mobility in the short and medium term has been immense, characterised by cancellations of physical mobility and its replacement with 'virtual mobility' via emergency remote teaching. Overall challenges have been how to provide international students with adequate academic and psychological support (whether they are based on-campus or abroad). Other specific challenges exist for 'third country' students who face challenges with student visas and residence permits. The main open question facing international student mobility in the medium term (in the academic year 2020/2021) is how universities will cope with decreases in enrolments of international students and how they will adequately support those who have decided to enrol in 'virtual mobility' or blended mobility programmes.

- Overview of policy implications: At the system level, public authorities should continue to stimulate the goal of international collaboration in higher education, including student mobility, redirecting funds originally intended for physical mobility to creative solutions such as 'internationalisation at home' strategies, and high-quality virtual mobility. At the higher education institution level, a range of support measures should be set up to ensure that international students receive appropriate academic and psychological support. During course delivery, equal access should be ensured to online learning tools, being mindful of the diversity in student populations, including students who will be following courses from other time zones.

While the COVID-19 pandemic continues to disrupt all aspects of higher education institution activities in the current 2020/2021 academic year, adopting a systematic approach to addressing some of the most pressing challenges and needs identified above could contribute to achieving much more favourable outcomes for staff and students. Some of the good practice highlighted in this report can provide inspiration as to the kinds of measures that can be adopted in different contexts (some requiring additional funding, others not).

## Peer learning: the potential of transnational good practice exchange

In addition to identifying the above trends, the report also presented nine different examples of good practices in addressing different aspects of the COVID-19 pandemic. The good practices, which featured examples from 11 different countries as well as transnational responses, included the following types of interventions

- System-level responses by governments to provide guidance for universities, additional financial support to students, flexibility in visa/residency procedures and targeted funding to support innovation in teaching methods.

- Institutional-level responses by higher education institutions to support underrepresented, disadvantaged and vulnerable students (in terms of equipment, financial support and psychological support) and to support international students.

- Network-level responses to share online platforms and learning resources and to brainstorm solutions to joint challenges.

While the featured practices are only illustrative of the innumerable responses to COVID-19 by higher education stakeholders throughout Europe, they serve the purpose of highlighting two important messages. Firstly, contrary to the perception of higher education institutions and systems as being slow and bureaucratic, the good practices demonstrate that the COVID-19 crisis resulted in a range of rapid, proactive and creative interventions to address pressing needs (locally and at the system-level). Secondly, the fact that even a small number of good practices can already provide inspiration for other institutions to adopt similar approaches to identical challenges underlines the importance of peer learning as a key way of addressing crises such as COVID-19.

## Concluding reflections

Based on the review of the emerging evidence, even the assessment of the short- and medium-term impact of COVID-19 on higher education remains incomplete. More research will be required to assess the impact of learning losses, the financial impact and the impact on educational inequalities. The long-term impact is therefore even more difficult to predict, especially since it still unknown how long the COVID-19 pandemic will continue to affect our societies in the way it has during 2020.

A concern expressed in many of the surveys and opinions reviewed in this report is that there is a risk that COVID-19 could result in devastating consequences for higher education in worldwide including: major financial cuts from the public sector, major tuition fee losses (especially in systems with significant numbers of fee-paying international students), potential closures of certain higher education institutions, and negative outcomes for underrepresented, vulnerable and disadvantaged groups (decreased access and increased drop-out).

At the same time, the COVID-19 pandemic has provided an opportunity to reflect critically on how higher education is organised and delivered, and to formulate creative solutions and alternative possibilities for future directions in higher education. Among the prominent perspectives presented in this report are: the opportunity to accelerate higher education transformation and improve the learning process by adopting innovative approaches to organising online learning; the opportunity to adopt creative approaches to internationalisation (virtual mobility and 'internationalisation at home') and the opportunity to genuinely place the social dimension of higher education as a high-level priority in European higher education systems.

It may still take months or even years to determine the full impact of the COVID-19 pandemic on our societies as a whole, and on higher education in particular. There are also numerous other aspects of higher education that need to be considered in such a process, that were not covered in this report. For example: what the impact of COVID-19 will be on

university research (in terms of accessibility of research infrastructures, sustainability of international research collaborations and ability to carry out fieldwork); what the impact will be on university engagement with external partners (businesses, public authorities and civil society) and on universities' broader societal impact; and what the impact will be on the levels of public funding of higher education in Europe. It is therefore crucial to continue to analyse these developments in the coming academic year through further surveys and research.

Higher education will not be able to address the range of challenges highlighted in this report, nor become a driver of the solutions and innovations in the post-COVID recovery period, without substantial support from public authorities. As emphasised by UNESCO IEASLC (2020), the post-crisis context will require governments to take measures to revive the economy, and higher education 'must be seen as a tool in a context of economic recovery and, as such, must be an integral part of the stimulus programs that are designed' (p. 38). We hope that the present report will provide an initial input to inform this process, by providing policymakers, as well as higher education institutions, students and other stakeholders at the European, national and local levels to better understand the emerging trends and challenges, and to identify policy responses to address those challenges.

# References

American College Health Association (ACHA) (2020). *ACHA Guidelines: Supporting Vulnerable Campus Populations During the COVID-19 Pandemic*, ACHA. Retrieved on 14 September 2020 from https://www.acha.org/documents/resources/guidelines/ACHA_Supporting_Vulnerable_Populations_During_the_COVID-19_Pandemic_August2020.pdf?utm_campaign=latitude%28s%29&utm_medium=email&utm_source=Revue%20newsletter

American Council on Education (ACE) (2020). *Higher Education Fourth Supplemental Letter: Letter to Senator Mitch McConnell and Senator Chuck Schumer*, ACE. Retrieved on 27 July 2020 from https://www.acenet.edu/Documents/Letter-Senate-Higher-Ed-Supplemental-Request-040920.pdf

Aristovnik, A., Keržič, D., Ravšelj, D., Tomaževič, N., Umek, L. (2020). *Impacts of the COVID-19 Pandemic on Life of Higher Education Students: A Global Perspective*. MDPI. Retrieved on 17 November 2020 from https://www.researchgate.net/publication/343555357_Impacts_of_the_COVID-19_Pandemic_on_Life_of_Higher_Education_Students_A_Global_Perspective

Aucejo, E. M., French, J., Araya, M. P. U., Zafar, B. (2020). The impact of COVID-19 on student experiences and expectations: Evidence from a survey. *Journal of Public Economics*, 191, 104271. Retrieved on 17 October 2020 from https://doi.org/10.1016/j.jpubeco.2020.104271

CEDEFOP (2020). *Digital gap during COVID-19 for VET learners at risk in Europe. Synthesis report on seven countries based on preliminary information provided by CEDEFOP's Network of Ambassadors tackling early leaving from VET,* CEDEFOP. Retrieved on 18 November 2020 from https://www.cedefop.europa.eu/files/digital_gap_during_covid-19.pdf

Chirikov, I., Soria, K. M, Horgos, B., & Jones-White, D. (2020). *Undergraduate and Graduate Students' Mental Health During the COVID-19 Pandemic.* UC Berkeley: Center for Studies in Higher Education. Retrieved on 30.11.2020 from https://escholarship.org/uc/item/80k5d5hw

Conférence des présidents d'université (CPU) (2020). *Lutte contre le covid19: Pour le soutien à tous les étudiants*. Accessed 30.11.2020 at: http://www.cpu.fr/actualite/lutte-contre-le-covid19-pour-le-soutien-a-tous-les-etudiants/

Di Pietro, G., Biagi, F., Dinis Mota Da Costa, P., Karpinski, Z. Mazza, J. (2020). *The likely impact of COVID-19 on education: Reflections based on the existing literature and recent international datasets*, EUR 30275 EN, Publications Office of the European Union. Retrieved on 18 November 2020 from https://publications.jrc.ec.europa.eu/repository/bitstream/JRC121071/jrc121071.pdf

Doolan, K., Barada, V., Burić, I., Krolo, K., Tonković, Ž. (forthcoming). *Student life during the COVID-19 pandemic lockdown: Europe-wide insights,* European Students' Union (ESU).

European Commission, Council of the European Union (2009*). Council conclusions of 12 May 2009 on a strategic framework for European cooperation in education and training ('ET 2020') 2009/C 119/02*. Retrieved on 10 November 2020 from https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:52009XG0528(01)

European Commission (2017). *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on a renewed EU agenda for higher education.* 30 May 2017, COM(2017)

247 final. Retrieved on 20 August 2020 from https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52017DC0247

European Commission (2020). *Communication from the Commission to the European Parliament, the* Council*, the European Economic and Social Committee and the Committee of the Regions on achieving the European Education Area by 2025*. 30 September 2020, COM(2020) 625 final. Retrieved on 2 October 2020 from https://ec.europa.eu/education/sites/education/files/document-library-docs/eea-communication-sept2020_en.pdf

European Commission, Directorate General for Education, Youth, Sport and Culture (DG EAC) (2020a). *Erasmus+ and European Solidarity Corps: Survey on the impact of COVID-19 on learning mobility activities*. Retrieved on 1 October 2020 from https://ec.europa.eu/programmes/erasmus-plus/resources/documents/coronavirus-learning-mobilities-impact-survey-results_en

European Commission – Directorate General for Education, Youth, Sport and Culture (DG EAC) (2020b). *European Universities Initiative: Survey on the impact of COVID-19 on European Universities – Main conclusions*. Retrieved on 01 November 2020 from https://ec.europa.eu/programmes/erasmus-plus/sites/default/files/coronavirus-eui-impact-results-may2020_en.pdf

European Commission – Directorate General for Education, Youth, Sport and Culture (DG EAC) (2020c). A *European approach to micro-credentials. Output of the micro-credentials higher education consultation group* Retrieved in 23 January 2021 from https://ec.europa.eu/education/sites/default/files/document-library-docs/european-approach-micro-credentials-higher-education-consultation-group-output-final-report.pdf

European Migration Network (2019). *Attracting and Retaining International Students in the EU*, European Migration Network. Retrieved on 10 November 2020 from https://ec.europa.eu/home-affairs/sites/homeaffairs/files/00_eu_international_students_2018_synthesis_report.pdf

European Migration Network / Organisation for Economic Cooperation and Development (EMN/OECD) (2020). *Impact of COVID-19 on international students* in *EU and OECD Member States – EMN-OECD Inform,* European Migration Network. Retrieved on 2 October 2020 from https://ec.europa.eu/home-affairs/sites/homeaffairs/files/00_eu_*inform2*_students_final_en.pdf

Farnell, T. (2020). *Community engagement in higher education: trends, practices and policies*. NESET report. Luxembourg: Publications Office of the European Union. doi: 10.2766/64207.

Gabriels, W., Benke-Aberg, R. (2020). *Student Exchanges in Times of Crisis – Research report on the impact of COVID-19 on student exchanges in Europe*, Erasmus Student Network AISBL. Retrieved from

Gaebel, M. Kupriyanova, V., Morais, R., Colucci, E. (2014). E-learning in European Higher Education Institutions, European University Association. Retrieved on 20 October 2020 from https://eua.eu/downloads/publications/e-learning%20in%20european%20higher%20education%20institutions%20results%20of%20a%20mapping%20survey.pdf

Gaebel, M., Zhang. T. (2018). EUA Trends 2018 Learning and teaching in the European Higher Education Area, European University Association. Retrieved on 20 October 2020 from https://eua.eu/downloads/publications/trends-2018-learning-and-teaching-in-the-european-higher-education-area.pdf

Gardner, M. (2020). *Government accused of double standards in academic exchange*. *University World News*. Retrieved on 01 November 2020 from https://www.universityworldnews.com/post.php?story=20200815125433825

Gardner, M. (2020). *International applications down by 20% on last year*. University World News. Retrieved on 30 November 2020 from https://www.universityworldnews.com/post.php?story=20200926040212787

Gatti, T., Helm, F., Huskobla, G., Maciejowska, D., McGeever, B., Pincemin, J.-M. et al. (2020). *Practices at Coimbra Group universities in response to the COVID-19: A collective reflection on the present and future of higher education in Europe*, The Coimbra Group. Retrieved on 2 October 2020 from https://www.coimbra-group.eu/wp-content/uploads/Final-Report-Practices-at-CG-Universities-in-response-to-the-COVID-19.pdf

G20 (2020). *Education Ministers' Statement on COVID-19*, G20. Retrieved on 2 October from https://g20.org/en/media/Documents/G20SS_Statement_Education%20Ministers%20Meeting_EN.pdf

Global University Network for Innovation (GUNI) (2020). *2nd GUNi International Conference on SDGs: Higher Education & Science Take Action – Summary Report*. Retrieved on 11.01.2020 from: http://www.guninetwork.org/files/guni_international_conference_on_sdgs._higher_education_and_science_take_action._summary_report.pdf

Hauschildt, K., Gwosc, C., Vögtle, E. M. (2018). *Social and Economic Conditions of Student Life in Europe: Eurostudent VI 2016-2018; Synopsis of Indicators*, DZHW. Retrieved on 20 November from https://www.eurostudent.eu/download_files/documents/EUROSTUDENT_VI_short_report.pdf

Hauschildt, K., Gwosć, C., Schirmer, H., Cras, F. (2020). *The Social Dimension of Student Life in the EHEA in 2019*. DZHW. Retrieved on 27 November 2020 from https://www.dzhw.eu/en/forschung/governance/pub

Hodges, Ch. B., Moore, S, Lockee, B. B., Trust, T., Bond, M. A. (2020). *The Difference Between Emergency Remote Teaching and Online Learning*, EDUCase Review. Retrieved on 15 October from https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning

Hudzik, J. K. (2020). *Post-Covid higher education internationalizatio*n. *NAFSA trends & insights,* NAFSA. Retrieved on 2 October 2020 from https://www.nafsa.org/sites/default/files/media/document/trends-insights-september-2020.pdf

Hurley, P. (2020). *Coronavirus and international students*, Victoria University. Retrieved on 7 November 2020 from https://www.vu.edu.au/sites/default/files/international-student-update-2020-mitchell-institute.pdf

Hyun, J., Quinn, B., Madon, T., Lustig, S. (2007). *Mental health need, awareness, and use of counseling services among international graduate students*. Journal of American College Health, 56(2), 109–118. Retrieved on 20 August 2020 from https://doi.org/10.3200/JACH.56.2.109-118

Inside Higher Ed (2020). *Responding to the COVID-19 Crisis: A Survey of College and University Presidents*, IHE. Retrieved on 2 November 2020 from https://www.insidehighered.com/booklet/responding-covid-19-crisis-part-ii-new-survey-college-and-university-presidents

ILO, FAO, IFAD and WHO (2020). *Impact of COVID-*19 *on people's livelihoods, their health and our food systems: Joint statement by ILO, FAO, IFAD and WHO*. Retrieved on 2 November 2020 from https://www.who.int/news/item/13-10-2020-impact-of-covid-19-on-people's-livelihoods-their-health-and-our-food-systems#:~:text=The%20economic%20and%20social%20disruption,the%20end%20of%20the%20year

Jump, P. (2020). *THE Leaders Survey: Will Covid-19 leave universities in intensive care*, Times Higher Education. Retrieved on 30 October 2020 from https://www.timeshighereducation.com/features/leaders-survey-will-covid-19-leave-universities-intensive-care

Kalantzis, M., & Cope, B. (2020). After the COVID-19 crisis: Why higher education may (and perhaps should) never be the same. *Educational Philosophy and Theory*, 24-27. https://doi.org/10.46786/ac20.9496

Kercher, J., Plasa, T. (2020). *COVID-19 and the impact on international student mobility in Germany Results of a DAAD survey conducted among international offices of German universities,* DAAD. Retrieved on 4 November 2020 from daad_2020_covid-19_and_the_impact_on_international_student_mobility_in_germany.pdf

KU Leuven (2020). Studying in times of corona: KU Leuven and students focus on (online) support for mental well-being. Retrieved on 27 November 2020 from https://nieuws.kuleuven.be/nl/2020/ku-leuven-zet-samen-met-studenten-in-op-online-ondersteuning-voor-mentaal-welbevinden

London Ministerial Communique 18 May 2007 – Towards the European Higher Education Area: responding to challenges in a globalised world. Retrieved on 20 September 2020 from http://www.ehea.info/media.ehea.info/file/2007_London/69/7/2007_London_Communique_English_588697.pdfMajor, L. E., Machin, S. (2020). *Covid-19 and social mobility. CEP COVID-19 ANALYSIS*, Centre for Economic Performance. Retrieved on 9 November 2020 from http://eprints.lse.ac.uk/104673/1/Machin_covid_19_and_social_mobility_published.pdf

Major, L. E., Eyles, A., Machin, S. (2020). *Generation COVID: Emerging work and education inequalities. LSE-CEP Covid-19 analysis,* Centre for Economic Performance. Retrieved on 9 November 2020 from https://cep.lse.ac.uk/pubs/download/cepcovid-19-011.pdf?utm_source=miragenews&utm_medium=miragenews&utm_campaign=news

Marinoni, G., van't Land, H., Jensen, T. (2020). *Global Survey Report The impact of COVID-19 on higher education around the world,* International Association of Universities. Retrieved on 20 August from https://www.iau-aiu.net/IMG/pdf/iau_covid19_and_he_survey_report_final_may_2020.pdf

Marklein, M. B. (2020) *New international student enrolments drop by 43% in US,* University World News. Retrieved on 30 November 2020 from https://www.universityworldnews.com/post.php?story=20201116050900954

Martel, M. (2020a). *COVID-19 effects on US higher education campuses: From emergency response to planning for future student mobility*, Institute for International Education's (IIE). Retrieved on 21 October from https://www.iie.org/Research-and-Insights/Publications/COVID-19-Effects-on-US-Higher-Education-Campuses-Report-2

Martel, M. (2020b). *COVID-19 effects on US higher education campuses: Academic Student Mobility to and from China*, Institute for International Education's (IIE). Retrieved on 21 October from https://www.iie.org/COVID19-Effects-on-US-Higher-Education-Campuses

Means, B., Neisler, J., Langer Research Associates (2020). *Suddenly Online: A National Survey of Undergraduates During the COVID-19 Pandemic,* Digital Promise. Retrieved on 14 November 2020 from https://digitalpromise.dspacedirect.org/bitstream/handle/20.500.12265/98/DPSuddenlyOnlineReportJuly2020.pdf?sequence=3&isAllowed=y

Montacute, R., Holt-White, E. (2020). *COVID-19 and Social Mobility Impact Brief# 2: University Access & Student Finance*, The Sutton Trust. Retrieved on 7 October 2020 from https://www.suttontrust.com/wp-content/uploads/2020/05/COVID-19-and-Social-Mobility-Impact-Brief-2.pdf

Mountford-Zimdars, A., Moore, J. (2020). *Safety, food and well-being are a greater concern than attainment: The views from university widening participation staff in the context of Covid-19*, Centre for Social Mobility, University of Exeter. Retrieved on 24 October 2020 from https://www.exeter.ac.uk/media/universityofexeter/aboutusresponsive/wideningparticipation/CV-19_Implications_Widening_Partricipation_practitioners_14.05.2020.pdf

Myklebust, J. P. (2020). *International student numbers up 13% despite COVID-19,* University World News. Retrieved on 30 November 2020 from https://www.universityworldnews.com/post.php?story=20200930054856301

National Forum for the Enhancement of Teaching and Learning in Higher Education (2020). Minister Harris Announces €5 million COVID-19 fund for teaching and learning reforms. Retrieved on 17 November 2020 from https://www.teachingandlearning.ie/2020/11/09/minister-harris-announces-e5-million-covid-19-fund-for-teaching-and-learning-reforms/#:~:text=Minister%20for

National Student Clearinghouse Research Center (2020). *National Student Clearinghouse Research Center's Monthly Update on Higher Education Enrolment*, National Student Clearinghouse Research Center. Retrieved on 21 October 2020 from https://nscresearchcenter.org/stay-informed/

OECD (2020), *Education at a Glance 2020: OECD Indicators*, OECD Publishing. Retrieved on 14 September 2020 from https://doi.org/10.1787/69096873-en.

Open University (2020). *Coronavirus: Information and free resources from The Open University.* Accessed on 25 January 2021 at: http://www.open.ac.uk/courses/coronavirus

QAA (2020). *QAA International Partners' Forum - 20 May 2020 - Summary Report*. Retrieved on 8 January 2020 from: https://www.qaa.ac.uk/docs/qaa/guidance/qaa-international-partners-forum-report.pdf

QS (2020a). *How* universities *are addressing the Coronavirus crisis and moving forward*, QS. Retrieved on 21 October 2020 from https://www.qs.com/qs-industry-reports/

QS (2020b). *How universities can support and protect prospective and current students in the upcoming academic year*, QS. Retrieved on 21 October from https://www.qs.com/portfolio-items/how-universities-support-protect-prospective-current-students-upcoming-academic-year-report/

Redden, E. (2020). *New International Students Barred From All-Online Classes*. Inside Higher Ed. Retrieved on 01 November 2020 from https://www.insidehighered.com/news/2020/07/27/ice-clarifies-new-international-students-cant-take-all-online-courses

Rizvi, F. (2020). Reimagining recovery for a more robust internationalization. *Higher Education Research & Development*, 1-4.

Rome Ministerial Communiqué 19 November 2020, EHEA Ministerial Conference. Retrieved on 20 November 2020 from on https://ehea2020rome.it/storage/uploads/5d29d1cd-4616-4dfe-a2af-29140a02ec09/BFUG_Final_Draft_Rome_Communique-link.pdf

Rome Ministerial Communiqué 19 November 2020 - Annex II to the Rome Ministerial Communiqué: Principles and Guidelines to Strengthen the Social Dimension of Higher Education in the EHEA. EHEA Ministerial Conference. Retrieved on 20 November 2020 from https://ehea2020rome.it/storage/uploads/5d29d1cd-4616-4dfe-a2af-29140a02ec09/BFUG_Annex-II-Communique_PaGs_SocialDimension.pdf

Rumbley, L. (2020). *Coping with COVID-19: International higher education in Europe*, European Association for International Education (EAIE). Retrieved on 2 October 2020 from https://www.eaie.org/our-resources/library/publication/Research-and-trends/Coping-with-COVID-19--International-higher-education-in-Europe.html

UNESCO (2015). *Rethinking Education. Towards a Global Common Good?,* UNESCO. Retrieved on 12 December 2020 from http://www.unesco.org/new/fileadmin/MULTIMEDIA/FIELD/Cairo/images/RethinkingEducation.pdf

UNESCO IESALC (2020). *COVID-19 and higher education: Today and tomorrow. Impact analysis, policy responses and recommendations,* UNESCO IESALC. Retrieved on 27 July 2020 from http://www.iesalc.unesco.org/en/wp-content/uploads/2020/04/COVID-19-EN-090420-2.pdf

UNESCO, UNICEF, World Bank (2020). *What have we learnt? Overview of findings from a survey of ministries of education on national responses to COVID-19*, UNESCO, UNICEF, World Bank. Retrieved on https://openknowledge.worldbank.org/handle/10986/34700

United Nations (2020a). *A UN Framework for the Immediate Socioeconomic Response to Covid-19*, UN. Retrieved on 20 August 2020 from https://unsdg.un.org/sites/default/files/2020-04/UN-framework-for-the-immediate-socioeconomic-response-to-COVID-19.pdf

United Nations (2020b). *Policy Brief: Education during COVID-19 and beyond*, UN. Retrieved on 20 August 2020 from https://www.un.org/development/desa/dspd/wp-content/uploads/sites/22/2020/08/sg_policy_brief_covid-19_and_education_august_2020.pdf

UN World Tourism Organisation (UNWTO) (2020). *Impact Assessment of the Covid-19 Outbreak On International Tourism.* https://www.unwto.org/impact-assessment-of-the-covid-19-outbreak-on-international-tourism

Universities Australia (2020). *COVID-19 to cost universities $16 billion by 2023.* Accessed on 15 October 2020 at: https://www.universitiesaustralia.edu.au/media-item/covid-19-to-cost-universities-16-billion-by-2023/

Universities UK (UUK) (2020). *A commitment by Universities UK to students' wellbeing*. Retrieved on 28 October 2020 from https://www.universitiesuk.ac.uk/news/Pages/commitment-uuk-to-students-wellbeing.aspx

Universitat Oberta de Catalunya (2020). *UOC helps more than 9,000 teachers adapt to remote teaching during the pandemic*. Retrieved on 25 January 2021 from: https://www.uoc.edu/portal/en/news/actualitat/2020/313-remote-teaching.html

University of Bristol (2020). Academic integrity for assessments affected by COVID-19. Retrieved on 8 January 2020 from: https://www.bristol.ac.uk/media-library/sites/academic-quality/documents/policy/academic-integrity-guidance-covid19.pdf

WonkHE (2020). *Don't Drop Out: Averting a Covid Retention Crisis*, WonkHE. Retrieved on 24 November 2020 from https://wonkhe.com/wp-content/wonkhe-uploads/2020/11/Non-continuation-research-November-2020.pdf

World Bank (2020a). *The COVID-19 Crisis Response: Supporting tertiary education for continuity, adaptation, and innovation*, World Bank. Retrieved on 20 August 2020 from http://documents1.worldbank.org/curated/en/621991586463915490/The-COVID-19-Crisis-Response-Supporting-Tertiary-Education-for-Continuity-Adaptation-and-Innovation.pdf

World Bank (2020b). *Tertiary education and COVID-19: Impact and mitigation strategies in Europe and Central Asia*, World Bank. Retrieved on 20 August 2020 from

http://documents1.worldbank.org/curated/en/783451590702592897/COVID-19-Impact-on-Tertiary-Education-in-Europe-and-Central-Asia.pdf

World Education Services (WES) (2020). *COVID-19 and Fall 2020: Impacts on US International Higher Education.* A WES Survey of Prospective Students. Retrieved on 21 November 2020 from https://knowledge.wes.org/research-report-covid-19-and-fall-2020.html

YERUN (2020). *The world of higher education after COVID-19: How COVID-19 has affected young universities*, YERUN. Retrieved on 18 November 2020 from https://www.yerun.eu/publications/the-world-of-higher-education-after-covid-19/

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