European Commission

TRANSFORMATION POST-COVID

The Future of European Universities

ESIR Focus Paper

Education
AI & digitalisation
Circular economy
Digital economy
Network thinking
Skills
Equality
Youth
Sustainable Development Goals
Climate and Environment
Energy
Transport
Governance
Citizen engagement

Independent
Expert
Report

Research and Innovation

Transformation post-COVID: The Future of European Universities

ESIR Focus Paper

More information on the European Union is available on the internet (http://europa.eu).

Cover: © DG Research & Innovation, 2021.

Transformation post–COVID

The Future of European Universities

ESIR Focus Paper

Daria TATAJ (Co-lead author)

Sylvia SCHWAAG SERGER (Co-lead author)

Sandrine DIXSON-DECLÈVE (ESIR Chair)

Pierre-Alexandre BALLAND

Francesca BRIA

Céline CHARVERIAT

Kirsten DUNLOP

Enrico GIOVANNINI

César HIDALGO

Ailin HUANG

Darja ISAKSSON

Francisca MARTINS

Montserrat MIR ROCA

Andrew MORLET

Andrea RENDA

TRANSFORMATION POST-COVID

THE FUTURE OF EUROPEAN UNIVERSITIES[1]

This ESIR Focus Paper provides a 'deeper dive' into the role of European Universities in achieving systemic change in the post-pandemic economy and society. It builds on and complements ESIR's second Policy Brief, which offers guidance on how a 'protect-prepare-transform' approach in the post-pandemic Europe can ensure fast learning from innovation by relying on smart and coherent policies, collaborative efforts across levels of government and decentralisation of governance, and most importantly the courage to direct research and innovation at the transformations Europe is facing.

The current sense of urgency, induced by the Covid-19 crisis, together with increased support for research and higher education offers a historic opportunity for universities to transform themselves in order to better help societies transform. In doing so, universities would reinforce their identity as independent curators of knowledge (generation, utilization, and collaboration), creativity, and critical thinking. They would safeguard their ability to generate excellent research, and provide students and society with the skills and knowledge to handle the complexity, challenges, and uncertainty we face today but also to drive the transformation needed to shape the common future we want.[2]

Universities are fundamental pillars of knowledge-based societies and democracies, and key drivers of economic and social development. They have been an integral and vital component of Europe's social, cultural, and economic fabric for millennia, are widely accepted, and respected institutions. We recognize the core universal strengths of European universities. They include academic freedom, autonomy and legitimacy, a recognized quality brand, a system of widely accessible education, and their strategic importance with their eco-systems as central partners for industry, SMEs, and hotbeds of science and technology-based startups. The culture of European universities reflects and reinforces core European values, such as democracy, freedom, equal access to opportunities, social mobility, and a strong belief in the value of science-based progress.

---

[1] This Focus Paper has much benefitted from the discussions in the ESIR session on "UNIVERSITIES AND THEIR ADAPTATION STRATEGIES FOR THE POST-CORONA WORLD" at the 2020 European R&I Days. ESIR would like to thank particularly the speakers of that session for their valuable contributions (see https://player.freecaster.com/embed/1367397).

[2] See also Sylvia Schwaag Serger, Anders Malmberg and Mats Benner (forthcoming, 2021), "Academic Leadership for University Renewal", in Schwaag Serger, Malmberg and Benner (eds) Renewing Higher Education: Academic Leadership in Times of Transformation, Lund University."

However, **already prior to Covid, many European universities were struggling with responding in an adequate and timely manner to technological, economic, and social changes in their surrounding societies.** Digitalization, lifelong learning, but also promoting diversity, equality, and social mobility, are examples of areas where universities have lagged behind technological developments and economic and societal needs.

Despite significant public national and European investment and policy actions, **a considerable portion of universities has been slow to embrace change.** For example, many fail to recognize and integrate competence, skills, and experience acquired outside their rather rigid structures of degrees, programs, and national contexts, and to accommodate a more heterogeneous student body (with regard to age, background, and educational needs).

The slow and introspective decision processes in academia stand in increasingly stark contrast with the acceleration of existing trends or radical disruptions, spurred by the crisis, which are currently fundamentally transforming many industries, regional innovation ecosystems and labor markets. In response, universities need to collaborate in new and more ways with surrounding organizations, institutions and industry in co-creating, disseminating, and utilizing knowledge. Knowledge transfer, entrepreneurial ecosystem on campus, local and global innovation networks and communities should be part of a strategy of every university.[3]

However, **while there are islands or pockets of world-class excellence in many universities combined with strong engagement in innovation and co-creation networks, a significant part of university departments and institutions shows limited capacity to renew themselves to ensure future excellence and relevance**. This phenomenon manifests itself as a structural problem within many of the EU Member State university systems. The dominant models of 'ivory tower' research culture, the on-campus educational model, and lack of cross-fertilization between research, innovation, education and entrepreneurship hold the system back.[4] Now, this must change if universities are to serve society during the pandemic and beyond into a sustainable future.

---

[3]   A Dynamic Approach to Developing and Implementing Disruptive Innovation Ecosystems in Regions, Final Reflections of the RISE Group, European Commission, 2019.

[4]   Tataj, D. Innovation and Entrepreneurship. A Growth Model for Europe Beyond the Crisis, Tataj Innovation Library New York, 2015.

> *Already before Covid, universities struggled to serve society with the knowledge and skills necessary to handle increasingly wicked problems combined with growing uncertainty and complexity.*

As our planet is grappling today with climate change, combining economic, social and environmental sustainability, combating poverty and inequality within and among countries and regions, universities must learn to engage citizens in co-creating new knowledge and new solutions, which serve the society. **The disconnect between academia and real life is one of the reasons why many learners either drop out or opt for alternative providers who offer more tailored and flexible forms of education**.

Covid and its consequences risk further accentuating a disconnect or tensions between academia (with a strong focus on the collegiate and often rather slow and inward-looking decision-making, and a tendency towards disciplinary divides and silos) and a society that is increasingly challenged, in turmoil, and in urgent need of finding holistic systems solutions to pressing problems and complex challenges. **Collectively, we need to unpack this tension now**.[5]

At the same time, the pandemic has sparked a strong and renewed widespread interest in research and education, with young people flocking to universities because of a fundamentally disrupted labour market and workplace. Moreover, universities in many European countries currently benefit from the fact that their funding base (which for most Higher Education Institutions comes primarily from the government) has so far remained relatively stable and that academia, education, and knowledge are still widely respected in their European societies.

In the medium term, **we may witness an increase in disparity with regard to institutional excellence across regions and across member states, but also in social inequality as students will vary in their ability to handle the new educational models, particularly remote learning**.

> *The pandemic calls upon universities to look with care at the working and learning environment of both faculty and students.*

The mass shift to remote work and learning may lead to decreased effectiveness of teaching, lower productivity when executing collaborative tasks, and marginalizing the most creative talent and students with high potential and/or special needs. This is especially prominent in relation to the internationalization strategy of universities and protecting international students.

---

[5]   See Transformation post-COVID: Mobilising Innovation for People, Planet and Prosperity, ESIR Policy Brief No. 2, 2021.

In response, **universities should put a special focus in the short-term on individuals and remote teams of students and faculty on keeping up social connectivity, supporting mental and physical health, and improving the online workplace and tools**. For example, universities should consider providing tailored support for well-being and mental health, preventing the increase of dropout rates, and offering financial assistance to complete degrees. A renewed focus should be given to support entrepreneurship and entrepreneurship education. In the European Single Market, where fixed income and lifelong employment are no longer the labour market standard, universities need to do more to offer researchers and prepare students for more flexible and alternative career options.

In the mid-term, these short-term adaptation initiatives should be institutionalized as new policies. **Universities should envisage a number of strategies and policies, including diverse funding schemes for financing education, more flexible educational offerings and research careers, and allowing student and faculty out-roads from and in-roads to academia**. For example, there is an urgent need to integrate new courses as mandatory, e.g. on complex systems thinking and problem-solving, crises management, and basic multidisciplinary courses around health pandemics-biodiversity loss, and climate change.

A very positive factor in the current situation is that many EU countries have so far responded to the current crisis by increasing funding for research and education. In contrast, universities in the US, for example, are operating in an increasingly difficult, even hostile context of polarization, revenue losses (due to declines in foreign students, cuts in public funding, and the dramatic drop in revenue from donors, athletics, and other income streams as a result of Covid and its effects), and criticism for exacerbating inequality and elitism.

However, this **advantage can easily turn into a disadvantage if it cements rigidities in structures and culture rather than promoting resilience and renewal**.

Firstly, the fragility of US universities makes the overall system stronger. Strong competition for students and resources means that if institutions do not adapt and innovate, they simply vanish, ensuring a dynamic system that fosters constant renewal. The competition also drives the constant search for a higher quality of both research and education. **Early observations on the adaptation strategies to the pandemic show that European universities are slower to adapt to the changing environment.** Partially because of stable and secure funding by the government, and because particularly continental European universities have not suffered similar revenue losses as US universities (due to a drop in foreign students, donations, and income from athletics), there is a strong incentive to do business as usual. In this context, increased funding from the government may actually prevent universities from embracing and embarking on a path of change.

Secondly, the pandemic pushes forward online education, which will become increasingly integrated with face-to-face education in a hybrid model. However, the comparative advantage in this space belongs to the companies, which develop digital products, i.e. tech companies (e.g. the Google certificates). It could be foreseeable that there is a future Netflix of education offering top-notch master classes in any topic for a symbolic fee, hiring the best academics in any given field, and providing world-class diplomas or labels partnering most likely in the top brands in education such as MIT or Harvard. This strategic direction coming from the tech giants puts the EU universities in a vulnerable position. Compared to the US, Europe lacks the big tech platforms, the global reputation, and the need for change driven by a super competitive market. **In the post-Covid world, where higher education will be much more online or hybrid in form, Europe risks losing the game as the world of the digital platforms is very unequal and "the winner takes it all"**.

Finally, **European universities must ensure that they can continue to act as champions of international cooperation and the global networked enterprise of science** and thus to provide an important counterweight to current trends towards nationalism, protectionism, and isolationism. Universities must take on a mission to invest in cross-sector collaboration, and thus become brokers between public and private sectors, global magnets for talent and innovation, connectors and community builders. Strategic networking for talent and innovation should be an inherent part of the new university culture.

> *For the sake of universities, and for the sake of Europe, it is imperative that this historic opportunity to transform universities is not missed!*

Universities should seize the opportunity presented by the pandemic to reinvent themselves. We believe this is essential in order for universities to maintain their central role and position in society as knowledge builders, solution providers, and developers of future leaders. Higher education experts, policymakers, and academic leaders agree on what should be changed in the short and mid-term for European universities to stay competitive, excellent, and relevant to meet today's societal challenges and to ensure tomorrow's European leaders have the tools they need to address future challenges. The challenge lies in the process of managing change within the universities and managing the systemic transformation where universities are key actors.

Universities can and should play a strategic role in leading this systemic transformation not only of research and education itself, but also of the socio-economic system of the European Union for the benefit of students, researchers, stakeholders such as industry and SMEs, and society at large. Their role as leaders is critical in fostering the transformation. More importantly, they should reconsider their identity as producers of knowledge but also as drivers of new approaches for

sustainable growth for people, planet, and prosperity advocated in the first ESIR Policy Brief.[6]

However, to undertake such a role, universities must recognize that the educational model as we know it has long been disrupted. As pointed out in the RISE policy report[7], transforming a traditional research-driven university into an innovation-driven university is not a Europe-specific challenge. Given their privileged position, European universities should dare to disrupt themselves and innovate to lead the economic and societal transformation in the historic moment of the current crisis.

On the one hand, this disruption is related to the digitalization of delivering education. Since the beginning of the pandemic, the digitalization of the European Higher Education Area has become the new normal. The massive shift to online education has made the entire system leap into the future, though it is too early to say whether the abrupt shift to remote teaching will lead to lasting improvements in the quality of education.

On the other hand, this shift makes universities compete for face-to-face with alternative off-campus and online models of education, which were already delivered online, such as diverse professional learning communities, and virtual universities. They were part of a changing paradigm of education before the pandemic. With the pandemic, the universities should create an interface to partner with alternative providers of education. This could help them embrace particularly the challenge of mass workplace disruption. **Life-long-learning and continuous re-skilling require universities to take advantage of the pandemic as the moment when they shift their approach from a 5-year degree to a 50-year learning curriculum.**

Given the urgency of the situation, universities should exit the 'ivory tower' of the 19-century type of academia. They should propose a new social contract with stakeholders in their local, regional and national ecosystems. They should become drivers of open science, of collaborative entrepreneurship and innovation, and of societal and economic renewal and transformation. We have sufficient examples in Europe and beyond, where this has been happening without compromising scientific excellence.

The focus on innovation and on entrepreneurship could be a powerful strategy to address the need to restart growth after the pandemic, address inequalities, and champion Europe 2050 agenda of a carbon-neutral continent. Networking and partnering for transformation should be one of the university adaptation strategies

---

[6]   Protect, prepare and transform Europe. Recovery and resilience post Covid-19, ESIR Policy Brief No. 1, 2020.

[7]   See footnote 2.

for the short and long time perspective. This includes redefining the identity of a university through redefining relations with society as well as with large and small businesses.

The pandemic offers a rare opportunity to advance the European Research and European Higher Education Areas. Both ERA and EHEA are ecosystems. The COVID-19 crisis has accelerated radical shifts in how we learn and work beyond anything we could have imagined when designing the ERA and EHEA. This gives tremendous opportunities to transform the ERA and EHEA into a much more globally competitive system and attract top researchers and top students when many degrees will continue to be delivered online or partly online even when the pandemic is over. To make it happen, there must be a buy-in from within universities to embrace change rather than defend the status quo. A massive university culture shift must happen to enable this change towards more competition, more flexibility, more openness, and responsibility to defend, prepare, and transform Europe beyond the pandemic.

Policy recommendations

...for Universities...

➢ Universities and government agencies overseeing universities should seize the opportunity presented by the current crisis to drive institutional renewal (culture, organization, decision-making processes, interaction with society, breaking down disciplinary silos, reconnecting research and teaching, changing incentive structures and systems, education)[8]

➢ The strategic renewal of education should include the reform of the curricula and learning paradigms to educate students and life-long learners for a fully sustainable economic development model; this requires a transdisciplinary approach as well as lateral skills training, such as leadership, innovation and entrepreneurship. The former trains people to have the right networks and skills to realize their leadership potential and ambition. The latter extends career options for students and connects them with future employers, partners and investors, ensuring that their creativity and ingenuity turns into fast-growing careers or new ventures for profit and/or social impact.

➢ Universities, as organizations, should lead the way towards sustainability in the broadest sense. They should consider setting goals for reducing their carbon footprint to zero, increasing diversity, combating inequality,

---

[8] Responding to this need for institutional renewal the European Commission launched a consultation process on a 'Higher Education Transformation Agenda' in December 2020 (Europe needs to cooperate to transform higher education – Universitetsläraren (universitetslararen.se))

strengthening innovation, and economic renewal, while safeguarding their academic excellence.

➢ A must-do for universities is to embrace fully digitalization for improving education with regard to access, quality and content, as well as for improving the quality of service they provide. This includes optimizing the cost structures, investing in talent, and channeling funds and other resources into areas of future impact.

➢ Universities should strengthen strategic collaboration networks with other European universities, for example with regard to the following:[9]

   ◦ Lifelong online learning (sharing educational content such as MOOC or online course e.g. on artificial intelligence or Agenda 2030.

   ◦ Pooling talent globally around selected themes/areas (e.g. through online platforms, networks, alliances strategically planned ahead rather than being a defensive or reactive policy.

   ◦ Developing new pan-European learning and innovation platforms in collaboration with industry

➢ Universities should focus on lifelong learning rather than a 5-year degree, provide a link to knowledge and education to SMEs, and professional both in standard and non-standard work contracts. They should adapt their curricula and teaching and learning methods to fit different learner groups and their needs. The learners, companies who need the talent and research universities create, and society at large should be at the heart of philosophy, culture, strategy, and policies of universities as champions of a better post-Covid world.

...for policy-makers...

➢ A widely spread new paradigm of higher education should be based on rethinking how research, innovation, entrepreneurship, and education are interconnected for real-world transformation, the real economy, and a better future society. This is not just about incremental initiatives or policies – it is about the institutional redesign, cultural and structural change, and new funding schemes.

➢ Research funders should encourage and incentivize universities to experiment with new models for education, transformation, and societal

---

[9] The European Universities Initiative launched by the European Commission in 2019 is an important initiative in this context.

interaction; this experimentation should be rewarded with availably of special funding lines for innovation within education, strengthening funding of initiatives, incentives, and structures that encourage breakthrough, high risk, and multidisciplinary research and ensure a strong link between such research and education. Part of this experimentation should be a free university education for the public good.

➢ The European Commission should propose measures to ensure that European universities' autonomy, legitimacy and competitiveness are not undermined by commercial actors, who might monopolize access, usage or ownership of data and data infrastructure.[10]

➢ The European Commission should champion a transformation of the European research and innovation ecosystem fostering radical, new ways of thinking, and turning ideas into new powerful policies and funding instruments.[11]

---

[10]   See, for example, the proposal for a Digital University Act https://www.universityworldnews.com/post.php?story=20210115122001617.

[11]   See, for example, policy briefs on the European Innovation Council, mission oriented-policies, or more recently on Industry 5.0.

Getting in touch with the EU

IN PERSON

All over the European Union there are hundreds of Europe Direct information centres.
You can find the address of the centre nearest you at: https://europa.eu/european-union/contact_en

ON THE PHONE OR BY EMAIL

Europe Direct is a service that answers your questions about the European Union.
You can contact this service:
– by freephone: 00 800 6 7 8 9 10 11 (certain operators may charge for these calls),
– at the following standard number: +32 22999696, or
– by email via: https://europa.eu/european-union/contact_en

Finding information about the EU

ONLINE

Information about the European Union in all the official languages of the EU is available on the Europa website at:
https://europa.eu/european-union/index_en

EU PUBLICATIONS

You can download or order free and priced EU publications from:
https://op.europa.eu/en/publications. Multiple copies of free publications may be obtained by contacting Europe Direct or your
local information centre (see https://europa.eu/european-union/contact_en).

EU LAW AND RELATED DOCUMENTS

For access to legal information from the EU, including all EU law since 1952 in all the official language versions, go to EUR-
Lex at: http://eur-lex.europa.eu

OPEN DATA FROM THE EU

The EU Open Data Portal (http://data.europa.eu/euodp/en) provides access to datasets from the EU. Data can be downloaded
and reused for free, for both commercial and non-commercial purposes.

ESIR is a high-level expert group that provides evidence-based policy advice to the European Commission on how to develop a forward-looking and transformative research and innovation policy.

This ESIR Focus Paper provides a 'deeper dive' into the role of European Universities in achieving systemic change in the post-pandemic economy and society. It builds on and complements ESIR's second Policy Brief '*Transformation post-COVID: Mobilising Innovation for People, Planet and Prosperity*', which offers guidance on how a 'protect-prepare-transform' approach in the post-pandemic Europe can ensure fast learning from innovation by relying on smart and coherent policies, collaborative efforts across levels of government and decentralisation of governance, and most importantly the courage to direct research and innovation at the transformations Europe is facing.

Research and Innovation policy