Higher Education in the World Report 8
Special Issue

New Visions for Higher Education towards 2030

Abridged version
Complete open-content report available at www.guni-call4action.org
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UNESCO
List of Abbreviations

CLO Chief Learning Officer
COLL Collaborative Online International Learning
DESD Decade of Education for Sustainable Development
EHEA European Higher Education Area
ERA European Research Area
ESD Education for Sustainable Development
EU A European University Association
FAIR Findable, Accessible, Interoperable, Reusable
GUNi Global University Network for innovation
HBCUs Historically Black Colleges and Universities
HEIs Higher Education Institutions
IAU International Association of Universities
ILO International Labour Organization
MCU Magna Charta Universitatum
MDGs Millennium Development Goals
OECD Organisation for Economic Co-operation and Development
PKM Personal Knowledge Mastery
RDF Researcher Development Framework
RII Responsible Research and Innovation
SDGs Sustainable Development Goals
SDLC Software Development Life Cycle
SDSN Sustainable Development Solutions Network
STEM Science, Technology, Engineering and Mathematics
SwAF Science with and for Society
THE Times Higher Education
UN United Nations
UNCED United Nations Conference on Environment and Development
UNESCO United Nations Educational, Scientific and Cultural Organization
WCECD World Commission on Environment and Development
WF World Education Forum
WHEC World Higher Education Conference

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research on cross-border higher education, teaching in international development and public policy, and his active public engagement. He was President of the International Education Association of Australia 2015-18 and works closely with the Association. He undertakes research, teaching and doctoral supervision through his membership of the RMIT Social and Global Studies Centre, the Australian APEC Study Centre, the Centre for Higher Education Internationalisation at Università Cattolica del Sacro Cuore, Milan, and the Melbourne Centre for the Study of Higher Education.

Special mention must be made to experts and GUNi members that contributed to the definition of the GUNi Vision by participating in the online focus group on the new GUNi Higher Education in the World Report “New Visions for Higher Education Institutions towards 2030”. List of participants:

- Budd Hall, Co-Chair UNESCO Chair in Community-Based Research and Social Responsibility in Higher Education, University of Victoria (Canada).
- Axel Didriksson, Universidad Nacional Autónoma de México, GUNI-LAC (Mexico)
- Valerii Monakhov, Head of UNESCO Chair “Education in a multicultural society”, The Herzen State Pedagogical University of Russia (Russia)
- Ramon Torrent, President, OBREAL Global (Spain)
- Sara López, Head of International Relations, Universitat Pompeu Fabra (Spain)
- Vidya Yerawdekar, Principal Director of Symbiosis Society, Symbiosis International University (India)
- Pastora Martinez, Vice-curator of Globalization and Cooperation, Universitat Oberta de Catalunya (Spain)
- Olusola Oyewole, Secretary-General · Association of African Universities (Ghana)
- Deb Adair, Executive Director, INQAAHE (The Netherlands)
- Oscar Felipe García, Famimundo Institute (Mexico)
- Santiago García Granda, President of Crue’s Commission for Agenda 2030, CRUE (Spain)
- Jairo Cifuentes, Rector, Universidad Javeriana de Bogotá (Colombia)
- Roger Chao, Assistant Director/Head of Education, Youth and Sports, ASEAN Secretariat (Indonesia)
- Ana Lúcia Gazzola, former Executive Director, UNESCO-IESALC; former Rector, Federal University of Minas Gerais (Brasil)

GUNi Presentation

Twenty-three years after GUNi was created, the mission and goals of this global network remain as relevant as ever. Our mission, which is already shared by 268 institutions in 85 countries, is to foster the role of higher education in society by supporting the renewal of its visions and policies around the world in terms of public service, relevance, social responsibility and innovation. Likewise, our objectives call on us to:

- Generate and share knowledge on higher education policy and management around the world.
- Promote the knowledge society by strengthening higher education systems and institutions for the sake of progress, culture and well-being.
- Support institutions and governments around the world for the advancement of higher education, scientific research and innovation.
- Promote the development of the 2030 Agenda and the Sustainable Development Goals.
- Encourage academic and scientific diplomacy to promote multilateralism and international cooperation.

Despite challenges and a lack of structural funding, GUNi continues to be a global benchmark in the field of higher education and university management. It gives us great pleasure to connect initiatives and projects with institutions around the world and to serve as benchmarks in the deployment of the 2030 Agenda and the Sustainable Development Goals. At the same time, we are pioneers in the introduction of new topics in the field of higher education and university management. It gives us great pleasure to connect initiatives and projects with institutions around the world and to serve as benchmarks in the deployment of the 2030 Agenda and the Sustainable Development Goals. At the same time, we are pioneers in the introduction of new topics in the field of higher education and university management.

The World Report you have in your hands will serve as the starting point to launch a strategic new long-term activity. We hope that the report will act as a catalyst for in-depth analysis and discussion that will be enhanced over the next few years through a web portal. This project involves a significant number of GUNi member universities that together will pave the way towards the transformation of HEIs. It is an exciting project that seeks to pool efforts and allow our partners to grow into relevant, inclusive, sustainable, innovative and socially responsible institutions.

I would like to end by thanking all the institutions that have placed their trust in us and have made the report a reality: the Catalan Government, the Spanish Ministry of Universities, the Catalan Agency for Development Cooperation and the “La Caixa” Foundation. We extend our gratitude to UNESCO for its continuous support. Likewise, we would like to highlight and express our appreciation for the work of the experts around the world who have collaborated with us, as well as the GUNi technical team, a small but highly professional and dedicated group of people. Thanks to all of you, the report will help us set in motion an exciting strategic project we want to share with you.

Josep M. Vilalta
Director
Global University Network for Innovation
UNESCO’s Introduction

The timing of this special issue in the GUNi World Report Series could not be more opportune or relevant. As the international communities of youth, teachers, researchers, employers and policymakers gather together in Barcelona for a global conversation at the 3rd UNESCO World Higher Education Conference, the dawn of a new vision for higher learning ecosystems has arrived. Every aspect of what we all hold true for universities around the world is changing, being rethought or reinvented. From issues of governance and financing of institutions, quality enhancement in provision and programmes, to equitable and inclusive access, harnessing digital technologies for student engagement, and internationalisation and cooperation in teaching, research and learning, modern seats of higher learning are at an existential crossroads. Whilst the directions taken will and must differ between systems and institutions, there is universal acknowledgment that higher education is being turned on its traditional axes.

Actions to address this reality cannot be undertaken lightly, in isolation or in a uniform fashion. Nevertheless, if the barometer of higher education relevance for local and national communities is to be retained, a reaction to changing norms is now paramount. Learner profiles are changing – notions of “traditional” students no longer apply. Everyone, young and old, is now a lifelong learner not necessarily by choice but by virtue of necessity in a constantly changing workplace where learning new skills and reskilling is almost a daily priority. Different types of learners need different types of courses and programmes; different types of courses and programmes need innovative new curricula; new curricula need flexible learning access modalities enabled by effective use of digital technologies. International cooperation in learning, teaching and research requires sustainable models to link students and researchers in the pursuit of discovery and scientific solutions that the planet needs for the future – a future engraved in the 17 UN Sustainable Development Goals (SDGs).

The UNESCO 3rd World Conference Roadmap will provide signposts at the different crossroads for higher education communities to share experience, knowledge and innovative collaborative approaches to realising each of the SDGs and the 2030 Agenda. Re-designing higher education institutions, their research and their learning programmes, and preparing skilled graduates must be the cornerstone for designing a sustainable future for us all. This GUNi Special Issue is a vital contribution to the bank of knowledge that will guide universities through a defining moment in their futures.

P. J. Wells
Chief, Higher Education
UNESCO

Catalan Association of Public Universities’ (ACUP) introduction

We are experiencing a period of accelerated transformations, we are walking towards a digital-human future and we are witnessing changes in the world of work, in our perception of the individual, citizenship and society, with movements that challenge our democracies and reveal a social crisis, changes in the methods of creation and dissemination of knowledge, in international relations and, undoubtedly, in our planet’s ecological and systemic imbalance. In the face of these great challenges, education, science and innovation are becoming more than ever, fundamental building blocks for progressive, sustainable and committed societies on a local and global scale.

In this context, we must rethink the university to make it a lever for social transformation. But we must not do this alone, we must move forward in a network, emphasising local, regional and international inter-university cooperation, in addition to cooperation with public institutions and societal actors. The Covid-19 crisis has shown us that cooperation is essential to provide adequate responses to the period of transformation we are currently experiencing on a local and global scale.

In this regard, the Catalan Association of Public Universities (ACUP) wears its cooperation as a badge of honour and regards this as its key mission. Created in 2002, ACUP groups the universities of Barcelona (UB), Autònoma de Barcelona (UAB), Politécnica de Catalunya (UPC), Pompeu Fabra (UPF), Girona (UdG), Lleida (UdL), Rovira i Virgili (URV) and Oberta de Catalunya (UOC). Through ACUP, the eight Catalan public universities forge close collaboration to promote relevance, efficiency and quality, both on an individual scale and within the Catalan higher education system.

Against this backdrop, our Association has a strong commitment on an international scale through the Global University Network for Innovation (GUNi), which we promote together with UNESCO. The GUNi network upholds the values and principles of UNESCO. GUNi embraces the values and principles of UNESCO, while driving the 2030 Agenda and the Sustainable Development Goals for the improvement and transformation of higher education institutions.
About the Report

1. Introduction

Since the creation of the Global University Network for Innovation (GUNi) in 1999 after the 1st UNESCO World Higher Education Conference, the network has been working to meet its core mission of generating knowledge, strengthening higher education systems around the world and supporting innovation in higher education institutions (HEIs). Through its series of Higher Education in the World Reports, GUNi fosters global and regional analyses of higher education institutions and systems. In particular, this special issue once again takes up GUNi’s mission, offering an overview of the present state of HEIs and their prospects looking towards 2030 and beyond.

The introduction aims to describe how the special issue has been conceived, setting out its aims, structure and methodology, as well as the importance of the selected topics and the approaches and principles that frame them.

Entitled “New Visions for Higher Education Institutions towards 2030”, the report analyses the state of higher education in the world and seeks to respond to the need for HEIs to transform themselves at a key time of major global changes. Three core questions guide the report’s approach:

- If we were to create an HEI from scratch today, what would it be like?
- If we were to reform HEIs, what changes should we put in place and most importantly how would we implement them?
- What should HEIs look like in the near future?

In seeking to answer these questions, the special issue builds on GUNi’s accumulated experience, both in terms of the world reports that we have published and the varied subjects and lines of work that we have pursued. The aim is to take an in-depth look at the current context, bringing together the top debates in the area of higher education, while also adhering to GUNi’s values and goals, in order to outline the way forward for HEIs. In other words, the special issue undertakes a detailed analysis of the present state of affairs in order to keep HEIs advancing successfully towards 2030 and beyond.

As a distinctive feature, the report focuses primarily on institutions rather than on systems or policies. In this vein, the covered topics are aimed directly at HEIs, seeking to achieve the maximum applicability of the findings and trusting that they will be of interest both to policymakers and to other stakeholders. This is because we need consequential analyses and bold ideas to make the best decisions, ones that will help us to build on the lessons learnt and create the kinds of societies and HEIs that we want for the future.

At the same time, the report is a stepping stone in a wider, more ambitious project entitled “GUNi International Call for Action (2022-2025): Rethinking HEIs for Sustainable and Inclusive Societies”. This project will be one of GUNi’s key strategic lines of action for 2022-2025 and will seek to encourage and help HEIs around the world to deploy the actions and changes that are needed to adapt and become more relevant, inclusive, effective, innovative and socially responsible.

Along these lines, it is also important to highlight that, in the context of the International Call for Action, the present report is conceived as a document that will evolve over the next four years. The aim is to add new materials, reflections and best practices in relation to the covered fields. All of the materials will be published online at the web portal for the special issue and the International Call for Action, including papers, interviews, videos and podcasts, so that the report will be at once a living document for analysis and reflection and a platform for transformational action in HEIs.

2. An important time for a special issue in the series of Higher Education in the World Reports

GUNi’s flagship project is the edition of its Higher Education in the World Report series, which has become a benchmark in the higher education sector after seven issues and a synthesis prepared for the 2nd UNESCO World Higher Education Conference. This time, the current context and situation of change calls for a special issue, not a report focused on a single topic like previous reports, but one that takes a broader view of higher education and sets out a renewed vision looking towards 2030 and beyond.

There are three main reasons why it is now time for the series to add a special issue.

First, GUNi has very recently celebrated its twentieth anniversary. Two decades have passed since GUNi sprang into existence after the 1st UNESCO World Higher Education Conference. Although our higher education systems and institutions and our societies have changed a great deal in the interim, our mission and values are now more important than ever: to foster the role of higher education in society and support the renewal of its visions and policies worldwide in terms of public service, relevance, social responsibility and innovation. More than ever, there is a need to reassert the social value, role and contribution of higher education institutions (HEIs), and a need for HEIs to build a new vision and strategy for the future.

Second, in the past few decades, our world has experienced major transformations and crises, including climate change and environmental degradation, demographic pressures, forced migrations, rising inequalities, political pressures and the transformation of the labour market. Some of these transformations could have a devastating effect on our societies and our planet, and might even become irreversible if clear action is not taken urgently. In any case, they have crucial implications for HEIs and the role of HEIs in society and it is of utmost importance to address them. Additionally, the Covid-19 pandemic has exposed pressing issues in higher education and society, and revealed rapid, undeniable transformations such as digitalisation.

Likewise, in recent years, there has arisen an unprecedented need and willingness to connect and cooperate. Yet, there have also emerged narrow-minded conceptions of identity that revolve around nationalism and “we first” policies. The context requires us to think about and develop new visions for higher education and its institutions, missions and values with regard to the public good and social responsibility.

Certainly, there is a need to rethink the role of higher education institutions and their contributions to society in light of the trends and major transformations that are now occurring. HEIs have their own specific characteristics as an outgrowth of their particular culture and region, but they are still part of a global, interconnected system that follows similar patterns.

Third, the 3rd UNESCO World Higher Education Conference (WHIEC), which will take place in Barcelona in May 2022 in partnership with GUNi, presents a unique framework and roadmap for the momentum and transformation of higher education in the years ahead. WHIEC 2022 has set new guidelines for policy, capacity building, and regional and international conventions and commitments. In doing so, it has drawn on the involvement of a broad range of stakeholders, including policymakers, rectors and presidents of universities, UNESCO Chairs, professors, students, staff, organisations, NGOs, civil society groups, businesses and GUNi representatives. The official launch and presentation of this report within the framework of WHIEC 2022 presents an additional raison d’être for a special issue to foster symbiosis and spur the transformation of HEIs.

3. The main premises of the report

The report’s approach is based on the key concepts and values of GUNi and UNESCO: human rights, public service, international cooperation, sustainable development, innovation and education for all. The main premises of GUNi, when designing and developing its world reports, are as follows:

- Higher education institutions are societal institutions, and higher education is a fundamental part of society, at the service of the public good.
- Excellence and public service are compatible. Our mission is not to seek the maximum competitiveness of HEIs while ignoring other considerations, but for the competitiveness of HEIs to be at the service of society’s interests and needs and to be useful for international collaboration to meet global challenges and advance knowledge, science and human progress.
- Beyond equipping students with the tools needed to enter the job market successfully, higher education is also key to providing people with critical thinking skills, wisdom and an understanding of the world.
- In an age of globalisation, higher education must contribute to global peace and human development through science, culture and communication, strengthening international partnerships and cooperation.
Accordingly, the present report is descriptive and analytical. Beyond studies and generic analysis, we understand that it is necessary to be very mindful of the reality and change, outlining the way forward while being cognizant both of the uncertainty that now surrounds us and of our limitations in predicting the future. That said, no uncertainty or limitation will stop us from imagining potential future scenarios.

The report focuses on HEIs, seeing them as societal institutions but also adopting a wider systemic view. We are speaking of higher education institutions instead of universities in order to include the wide variety of tertiary education providers while not trying to define only one model of institution. By taking a comprehensive view, the special issue acknowledges and values diversity and different realities across the world of higher education. We believe in the need for diversity. The vision that we are building will have room for many different types of HEIs.

Looking ahead over the current decade, we think that the biggest transformational potentials of the 2030 Agenda do not lie in pursuing single goals or targets but rather in taking a systemic approach that manages their myriad interactions.

Beyond studies and generic analysis, we understand that it is necessary to be very mindful of the reality of higher education across the many countries and regions of the world. Individual countries and regions face unique challenges and have diverse development priorities. The specific design of transformation pathways depends on each context: few solutions will work the same everywhere. Instead, we must strive to combine different sets of transformation levers based on the needs and conditions in each setting. At the same time, we need harmonised high-level efforts to steer the interactions between pathways and their aggregate outcomes in order to deliver universal progress towards the 2030 Agenda.

Lastly, the present report arises out of the need for continuity and coherence across the different stages of education: from basic education to higher education and lifelong learning. All too often, these realities are analysed separately, disconnectedly. Yet, in the context of championing lifelong learning, boundaries between stages make no sense at all. As UNESCO-IIESALC argues, any thinking about the mission and purposes of higher education cannot miss out its inescapable connections to primary and secondary education, as well as to lifelong learning. The aim here is to be able to flourish in and beyond higher education in 2050, the values and organisation of all levels of education should be connected.

1. “[I] scenarios help us learn from the future to reframe and reengineer our understanding of the present” OECD (2020). Back to the future of education: Four OECD scenarios for schooling.

4. Structure

In light of the starting positions and goals set out above, the present report has three parts. Following the introduction, the first part bears the title “New Context, New Visions” and brings together key considerations on higher education arising out of a selected array of current debates. The second part, which is called “Transitions: Key Topics, Key Voices”, provides room for in-depth analysis of the challenges in each area, and sets out the lines of work and proposals now underway towards the transformation of HEIs. The third and final part addresses the debates and realities of HEIs from a regional perspective, laying out contexts and perspectives in each of the six regions and examining their similarities and particularities. Each of the three parts is explored in greater detail below.

"New Visions for Higher Education towards 2030"

Part 1. New Context, New Visions
Analysis of the past 20 years
What is currently being done?

GUNi Vision
How higher education institutions must be shaped to respond to the current state of affairs
Prepared together with GUNi members

Part 2: Transitions: Key Topics, Key Voices
In-depth analysis of seven topics by contributions from renowned intellectuals

Part 3: Regional Approaches
Middle East and North Africa, North America, Asia and the Pacific, Europe, Africa, and Latin America and the Caribbean

4.1 Part 1: New Contexts, New Visions

The aim of the first part is to conduct an analysis of the context of higher education and construct a new vision for HEIs. When looked at in greater detail, this part explores what has happened in the first two decades of the twenty-first century in terms of general societal trends and trends in higher education institutions.

The eight thematic chapters go into specific areas of higher education that are important for its transformation towards 2030 and beyond. The themes or topics have been chosen for their significance and because, when taken as a whole, they give a good account of the current state of higher education in its entirety. The eight topic areas are set out in the figure below:

1. Impact of Covid-19 on higher education
2. The future of work: training in competences and skills throughout life
3. Citizens: promoting humanist values and profiles in a changing world
4. Knowledge: putting research and innovation at the service of social challenges
5. Sustainability: reinventing universities for a sustainable future
6. Internationalisation: reinforcing partnerships to attain common goals
7. Governance and professionals: building resilient, innovative and socially committed institutions
8. Preparing the future workforce: access and inclusion are transversal, overarching themes
4.2 GUNi Vision

The next part is called “The Vision of the Global University Network for Innovation”. Going a step further in this section, the report provides a purposeful document that lays out a new vision for HEIs in terms of how they must be shaped to respond to the current state of affairs. The new vision aims to be an inspiration that enables us, based on observation, to put forward institutional strategies, objectives, and action plans to achieve them.

This vision arises out of the fundamental values and mission of GUNi, drawing on the analysis conducted in the first part of the report and bringing in the contributions of experts and members of the network. To this end, GUNi created a task force of member representatives who worked closely with the GUNi secretariat to draft the vision. The vision was also shared with all members in order to gather their input and contributions.

The vision is structured in two main sections. The first section sets out the starting point and the principles that frame the scope of action, followed by a look at the way to achieve the vision, which envisions the actions to be taken to bring about change. The second section presents the key developments in the main areas of transformation that correspond to the topics addressed in the first part “New Contexts, New Visions”.

4.3 Part 2: Transitions: Key Topics, Key Voices

The second part of the report seeks to analyse and describe how we could move towards this new vision by addressing a number of core issues and topics in higher education. As its title suggests, the second part aims to respond to how we go from where we are now toward a future that makes HEIs inclusive and accessible.

Experts from all over the world have contributed to the content of these chapters based on their particular areas of expertise. Each topic is covered by a number of papers in which contributors set out the challenges, actions and findings and provide inspiring examples of HEIs that are working on initiatives, new developments, changes and innovations to adapt to the new context.

4.4 Part 3: Regional Approaches

Finally, the third part seeks to provide a regional approach on the understanding that, even though the contexts and forces may be global, each region has certain patterns and needs that need to be tackled from a regional perspective. Acknowledging that there are global similarities but also different purposes, organisational cultures, goals and strategies, the following questions guide the six regional chapters of the third part:

- What do the regions feel higher education institutions should be like in the future?
- What are the similarities? What are the differences?

As in the second part, several experts from each region have made contributions based on their own particular field of research, country or regional expertise. The result is six chapters that reflect the following regions:

<table>
<thead>
<tr>
<th>Transitions: Key Topics, Key Voices</th>
<th>Regional Approaches</th>
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</thead>
<tbody>
<tr>
<td>HEIs’ governance and public service: between autonomy and community engagement</td>
<td>Middle East and North Africa</td>
</tr>
<tr>
<td>Skills and competences: a humanist vision for a changing professional world</td>
<td>North America</td>
</tr>
<tr>
<td>Research and innovation: towards open, ethical and responsible research and innovation</td>
<td>Asia and the Pacific</td>
</tr>
<tr>
<td>Sustainability: reinventing the role and place of HEIs for a sustainable future</td>
<td>Europe</td>
</tr>
<tr>
<td>IKT and digitalisation: a digital-human future towards more inclusive and accessible HEIs</td>
<td>Africa</td>
</tr>
<tr>
<td>International higher education: from competition to collaboration</td>
<td>Latin America and the Caribbean</td>
</tr>
<tr>
<td>Higher education management: promoting new leadership and innovation</td>
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5. Methodology

Below is a detailed description of the methodology followed in each of the three parts and their respective chapters.

Part 1: New Contexts, New Visions

The first part, which is more analytical and wide-ranging in nature, followed an eight-step methodology:

I. General literature review
II. Identification of common issues and concerns
III. Preparation of an initial content outline
IV. Targeted literature review
V. Review of content outline
VI. Drafting of chapters
VII. Review and finalising of chapters

In the general literature review (step I), sources of information were reviewed, including reports on education and higher education, the mainstream print media at national and international levels, publications specialising in education and higher education, scientific papers, online conferences and seminars, books and book chapters, documentaries and interviews, and web portals on education and global trends.

The general literature review was broad and did not discriminate in terms of topics. The result was the identification of common issues and concerns (step II), that is, those matters that appeared repeatedly across the literature. Based on these ideas, we prepared an initial content outline (step III).

With the content outline in hand, the targeted literature review (step IV) delved more deeply into the literature on each identified topic, with focused searches on the aspects regarded as more significant. Based on the targeted readings that followed, the content outline was updated (step v) and the chapters drafted (step vi).

It is important to note that the selection of topics for the initial content online (step iii) sought to be representative rather than comprehensive. Our aim was not to cover every topic that is currently a focus of debate in higher education. The text of the drafted chapters (step vi) is based on the bibliography and is in some sense closer to a review. Rather than merely listing a succession of ideas, however, each chapter aims to group similar or parallel ideas together.

Lastly, the chapters were reviewed and finalised (step vii). This step involved the participation of outside experts, who brought their own views to the analysis.

GUNi Vision

Drawing out the key points from each of the topics addressed in the first part, the editorial team held working sessions to look globally at the context of higher education and mark out lines of action that not only reflect GUNi’s values and mission and the SDGs in Agenda 2030 but are also, in our view, crucial to the future of HEIs.

Then, a first draft was prepared and shared with all GUNi members in a process of participation and consultation that sought to gather their impressions and input to formulate a more comprehensive vision.

At the same time, a special consultation was undertaken with a selection of GUNi members and outside experts. In this case, the process took the form an online session structured as a focus group. Participants, who read and studied the vision document prior to the session, gave their individual views in the session and offered thoughts and suggestions to enrich the vision.

Parts 2 and 3:

The preparation of the second part “Transitions: Key Topics, Key Voices” and the third part “Regional Approaches” drew on the contribution of experts in the respective topics and regions covered.

Specifically, GUNi sought out potential authors who are specialists in the different topics or from the different regions. Given the particular field of expertise of each contributor, the editorial team proposed that he or she write a paper for inclusion in the special issue along the lines set out in the Concept Note. The contributions
were reviewed by the editorial team jointly with the authors in order to ensure quality and coherence across all contributions.

As a consequence, the resulting chapters have been shaped by many experts from a variety of regions or areas of expertise, whose perspectives are unique and uniquely their own, based on their own particular blend of ontological, professional and geographic principles. Neither the contributors’ choice of approach nor their use of terminology implies any particular preference or inclination of GUNi in one direction or another. This special issue as a whole seeks to encompass a wide range of views. For that reason, all of the topics and terminology put forward by the authors have been considered equally valid and pertinent.

6. An ongoing process

As noted earlier, the goal is for the special issue to be useful throughout the period 2022-2025 and in the context of the International Call for Action. To this end, GUNi has developed a new format. Not only will the report appear in print format and as a downloadable file, but GUNi will also launch a live webpage that will display all of the content related to the special issue and also be open to new creations.

As in earlier publications in the series of Higher Education in the World Reports, the print edition of the special issue has been created as an abridged version that contains the thematic chapters in the first part “New Contexts, New Visions” and overviews of the papers in the second part “Transitions: Key Topics, Key Voices” and the third part “Regional Approaches”. The complete report including the full papers in the last two parts is available in a totally open format at the GUNi website and the new website for the report itself.

What makes the report unique is that it will be a living document. Throughout the period 2022-2025, new contributions will be added in the form of papers, videos, interviews and podcasts, giving voice and bearing witness to new ideas, contributions and actions relating to higher education institutions and systems as they move in the direction of Agenda 2030 along the lines marked out by the GUNi vision. The overarching aim is for the International Call for Action and the special issue website to become a key open space for contributions to the transformation of HEIs around the world.
Part 1

New Contexts, New Visions

Entitled “New Contexts, New Visions”, the first part of the Higher Education in the World Report & Special Issue addresses core considerations in eight key areas on the transformation of higher education institutions towards 2030 and beyond.

The topics have been chosen for their significance and because, when taken as a whole, they give a good account of the current state of higher education in its entirety. The eight topic areas are:

- The impact of Covid-19 on higher education
- The future of work: training in competences and skills throughout life
- Citizens: promoting humanist values and profiles in a changing world
- Knowledge: putting research and innovation at the service of social challenges
- The digital–human future: constructing more inclusive and accessible universities
- Sustainability: reinventing universities for a sustainable future
- Internationalisation: reinforcing partnerships to attain common goals
- Governance and professionals: building resilient, innovative and socially committed institutions

The first part begins with the impact of Covid-19 on higher education, treating the topic as a transversal issue with consequences and effects on all of the areas that follow. We have chosen this issue as the right place to start because of the pandemic’s significant and unexpected impact in driving transformations like digitalisation and even spurring a paradigm shift in many aspects of society and HEIs.

Next come the main topics of the report, which are developed separately but are viewed broadly and share many points of connection. This view of interdependence reveals a holistic approach to transformation much as Agenda 2030 and the Sustainable Development Goals (SDGs) are conceived as a single horizon of sustainable development.

The next section of the report is entitled “The Vision of the Global University Network for Innovation”. Going a step further in this section, the report provides a purposeful document that lays out a new vision for HEIs in terms of how they must be shaped to respond to the current state of affairs. The new vision aims to be an inspiration that enables us, based on observation, to put forward institutional strategies, objectives, and action plans to achieve them.
1. An increased infrastructure, technology and knowledge gap

Covid-19 has revealed the enormous digital and infrastructure divide that exists between countries and regions, and between higher education institutions, in addition to that which affects the family environment. Worse still, during the pandemic the existing divide has deepened inequalities in various sectors, including education. The inability to go to school or university, the lack of connectivity and of a suitable space within the family, some universities’ institutional incapacity to face the pandemic, and technological and structural shortfalls at national level have highlighted and increased inequalities and imbalances. It has also been observed that these inequalities are not only related to access to knowledge, but also to the capacity to handle and use this knowledge. This phenomenon is known as the cognitive divide.

The digital divide has become evident in different ways in different countries. In countries with a medium level of development and even those known as developed countries, it was found that a large proportion of students lacked the right conditions for correct implementation of online teaching (IESALC 2020, p. 20). Furthermore, countries with a lower internet penetration rate and a more inadequate infrastructure resorted to media such as radio or television to ensure that education reached as many students as possible, as explained in a study on the application of technological measures to mitigate the effects of the pandemic, drawn up by the ministries of education in several countries (UNESCO, UNICEF, World Bank 2020, pp. 22–24).

In terms of higher education institutions, a study by the International University Association showed that 85% of European centres moved to online format, while institutions on the African continent mainly cancelled their classes and only 29% could make this change (Mari noni et al., 2020, p. 24). Farnell et al. (2021) explained that European universities could respond with greater efficacy to the implementation of distance education. For example, the University of Strasbourg identified 160 students whose lack of technological equipment meant that they could not access courses or examinations. The university prepared an emergency fund of €61,000 to meet the material needs of these students. In contrast, other higher education institutions were left behind. Bloomberg (2021) described situations such as that of South Africa, where a lack of incentives from the government and the universities led to protests and pressure to close the universities until these met financial demands resulting from the pandemic. In some higher education institutions, the implementation of technological resources caused controversy and was rejected as it was considered “impractical and elitist”.

In countries such as Zimbabwe, the charges for electricity and internet access are excessively high for the student body (University World News, 2020).

At the level of the family, students from vulnerable environments experienced considerable worsening in their conditions. The European Commission’s Joint Research Centre (2021a, p. 42) explained that the shift to online education increased existing inequalities among students. Specifically, it highlighted the lack of access to technology, the lack of support in homes, and the lack of a suitable environment and space. Reimers et al. (2021, p. 19) noted an increase in forced dependency on parental financial support, whose responsibility replaces that which would ideally correspond to the institution. Unfortunately, in some cases the institution is a much more reliable option than the family.

All of this shows that access to new technologies and connectivity should be considered a fundamental right. Consequently, governments, international organisations, NGOs, development partners and companies, among others, should work together to eliminate existing inequalities. Farnell et al. (2021), for example, advocate for such policies, which could be made possible with the introduction of a nation-wide recovery plan to invest in online infrastructure. Investments should also be made to educate the population in the use of these technologies (United Nations 2020, p. 24; International Commission on the Futures of Education, 2020, p. 7) and thus to avoid or close the cognitive divide (see the section on digitalisation).

The digital divide is only one symptom of the systemic inequality seen in the world of higher education for years. This inequality can be found in many forms in the sectors of the education system, as the provision of quality tertiary education does not depend exclusively on the higher education institutions. It is also strongly influenced by institutional capacity and state infrastructure, and by well-being and security at family and individual level. The combination of these three spheres...
shows how the digital divide, which has been revealed by the pandemic, is very deeply rooted in structural inequality. Consequently, the transition to digital learning is not only about technology but empowering its users and recognizing the primacy of the human dimension. Governments, public and private partners must step up action to narrow the digital divide, extend connectivity and electrification, develop quality digital learning contents and support teachers to master remote and hybrid teaching (Reimers et al., 2021, p. 2).

2. The economic and social crisis accompanying the health crisis

All economic crises inevitably impact education. It is difficult to make a general assessment of this impact in the case of the Covid-19 pandemic, as it has affected each country in a different way and each response strategy has been different. However, in general terms, it is clear that Covid-19 has altered access to higher education, that is, enrolment; the process of training students; and access to the job market, that is, employability after higher education. The extent and duration of economic crises and their impact on education depend on the public policies that are implemented at supranational, national and local levels, in line with the economic capacity of each country and higher education institution.

In terms of access to education, the abrupt halt in face-to-face activities due to the pandemic led to a drop in university enrolment. This situation was mainly due to the partial or complete suspension of the pandemic, which increased unemployment and poverty in some households. This increased the pressure on families and on young people with scarce resources, who see in university education a way to get out of a vulnerable situation. It is also seen what the long-term impact will be on students, particularly those from low-income families, women, minority ethnic groups, people with functional diversity and students from rural areas, among other vulnerable groups. As indicated in the IESALC (2020) report, the crisis would have deepened existing disparities in education and reduced opportunities in these sectors. The International Commission on the Futures of Education (2020, p. 19) also warned that the economic crisis would lead to greater job losses and an increase in vulnerability in these sectors to an extent not seen in decades. The structural and systematic discrimination against students in the most vulnerable sectors could even lead to a generational catastrophe (United Nations 2022: 10) and create a “Covid generation” that experiences an unprecedented decline in social mobility and faces a difficult situation with respect to their future (Farnell et al., 2021).

The pandemic has increased the hazards and risks suffered by women. The closure of education institutions caused a situation of greater risk for women, who were susceptible to greater abuse, domestic violence and an increase in forced and early marriages (United Nations 2020, p. 10). In addition, the pandemic meant that families had more time at home, which led to an increase in the time dedicated to caring for the family and the home, a role that is usually attributed to women. It is therefore women who neglect their work and study time, which inevitably increases the gender gap (United Nations, 2020, pp. 10-11).

In addition, as Taner stated (2021), the pandemic has affected universities’ budgets and has led several institutions to state that they are in a financial crisis. IESALC (2020, p. 28) notes that the most vulnerable universities are the small and medium-sized private institutions that have less economic and technological capacity to guarantee online teaching. Although public universities are less likely to disappear, as they generally receive state support, they may suffer from large cuts in public funding and a drop in student contributions (IESALC, 2020, p. 28). To understand the situation and to be able to take the most suitable measures, the losses generated in higher education institutions due to decreased income from local and international student enrolments need to be assessed (Farnell et al., 2021).

Regarding employability, another impact associated with the pandemic has been an increase in fears and concerns among students regarding their professional future (Aristovnik et al., 2020, p. 22). The Internatio- nal Labour Organization noted that the pandemic has wreaked havoc in the job market. It has exacerbated job losses with increased unemployment and a worrying rise in work inactivity, causing a reduction in working hours in those who are still employed and creating a global loss in labour income. Above 25% of those employed in temporary jobs during the first quarter of 2021 were previously permanent employees. Although informal work dropped sharply in mid-2020, a rela- tively rapid recovery has been seen that suggests that employees who lost their jobs have entered the inform- al economy (International Labour Organization [ILO], 2022). Therefore, the pandemic has accentuated job insecurity and economic uncertainty. Farnell et al. (2021) noted that a possible mid-to-long-term effect of the shift to online education could be an increase in unemployment among university graduates. This would be due to employers’ lower trust in the quality of online studies and their demands. However, some distinctions should be made. The e-Valuate project has defined a series of important criteria to recognize quality online education through the “quality, authenticity, level, learning outcomes, workload, testing and participant identification of an e-learning certifica- te” (NUFFIC 2019, p. 5). These elements contribute to credibility and transparency, which would help online qualifications to be recognised by employers (Anderssen et al., 2021). In addition, higher education institutions will need to create new laws and regulatory terms for quality assurance and recognition of qualifications in the context of distance learning, to protect acade- mic integrity (Farnell et al., 2021). The pandemic has helped to generate and promote better development of technologies, at the same time as it has increased the offering of distance courses. Gradually, this type of education will gain recognition by employers, as long as quality criteria are met.

Education should be seen as an essential tool to get out of this socioeconomic crisis (Farnell et al., 2021). Universities and states should plan mitigation strategies and anticipate the impact on student enrolment and employability. Financial support should be given to students and higher education institutions to be able to get through the crisis and reduce the effects in the short, medium and long term after the pandem- ic (Farnell et al., 2021). In addition, it is important to consider the gender dimension in inequalities that have been worsened as a result of the pandemic. This crisis has shown that the right to education should be flexi- ble and adaptable to the circumstances, contexts and needs of society. Furthermore, it has revealed that the right to education needs to be updated and extended (UNESCO 2020, p. 12).

3. Teaching and studying in a post-pandemic society

The sudden shift towards online teaching and learning brought about several changes and long-term consequences for teachers and students, and to the relationship between them. In the post-pandemic context, teachers’ and students’ skills and competences must be updated or rethought in face-to-face and online formats. The virtual classroom comes with some serious challenges, which affect the quality of student life in many ways. For example, vulnerable students may have limited access to educational resources, and privacy may be violated by big data technologies. As higher education becomes increasingly hybrid, it remains to be seen how the overall quality of educational competences of students and teachers will be affected in the long term. As for the face-to-face format, after the experience of the pandemic, it is even clearer that the classroom plays an important role in providing a healthy, enriching environment for students.

During the pandemic, teachers had to remodel their teaching methods in a format that was unexpectedly forced into their professional lives. As competent and eloquent as a teacher may be, the quality of their lec- tures could be involuntarily hindered by their lack of experience in using the virtual format as the main tool for their teaching. This idea was reinforced by IESALC (2020, p. 36), which stated that the knowledge and expertise required to understand the technological complexity of the virtual format has exacerbated the need to improve teachers’ competences in the difficult task of efficiently adapting their lectures to online teach- ing. Similarly, Farnell et al. (2021) pointed out that the pandemic revealed a need for thorough pedagogical and technological training of academic and adminis- trative staff on data protection in online tools, so that online teaching can be properly prepared and imple- mented.

As for students, the lack of face-to-face social interac- tion in college campus life diminishes and undermines what is generally considered a unique experience at this stage in life. Digital technologies can provide new teaching methods that counter the loss of physical pre- sentence, albeit not entirely. Farnell et al. (2021) argued that without an approach focused on safeguarding pre- sentence, vulnerable sectors’ participation in the student community could be reduced.
This would raise significant concerns about educational equity. The International Commission on the Futures of Education (2020 pp. 9-10) agreed with this assessment: This [virtual education] is a major problem for children living in poverty worldwide, who often rely on the physical setting of their schools to provide educational materials, guidance, and, sometimes, the only decent meal of the day. In their homes, especially during times of confinement or quarantine, children can face multiple forms of abuse and violence. Crowded conditions, a general lack of resources, particularly digital devices and connectivity, mean that typically the cost – in terms of education and general well-being – of the current health crisis will be highest for populations that are already vulnerable.

Those who do not suffer from the digital divide are typically digital natives and thus are familiar with digital tools for education. However, the complete digitalisation of education eroded what Agamben (2020) considered the essence of student life (“studenthood”). The physical exchange of ideas and perspectives between teacher and student, and between students themselves, who come, often from all over the world, to share a particular way of life based on learning and growing. Losing the essence of studenthood – regardless of whether this is due to a lack of access to technology or teachers’ lack of technological know-how – implies that no matter how developed and well-implemented the technology is, the quality of education will be hindered.

In many countries where the essence of student life has been severely affected, there is a general lack of purpose among students regarding the inherent goal of their commitment to educate themselves: “the effects of the pandemic in higher education institutions has dramatically increased students’ concerns about the future of their professional careers” (Aristovnik et al. 2020, p. 22). As Burns et al. (2020, p. 7) pointed out, financial constraints, social isolation and overwork are many factors affecting the mental well-being of students that contribute to the aforementioned loss of “studenthood” as well as the loss of motivation to continue higher education as a worthy endeavour. The loneliness and isolation resulting from not interacting with friends and companions is extremely detrimental to a student’s mental health. The lack of interaction is also associated with an inability to actively experien- ce and perfect competences related to teamwork and organisation.

To address this, students should be allowed to switch between online and in-person classes for flexibility (Farrell et al. 2021). Actually, every aspect of student life in many higher education institutions is moving towards hybridisation, with a mix of on-campus and off-campus activities, online examinations, and new teaching methods. All of this will give students and teachers the experience they need to adapt to the new context (Gomez Recio & Coella, 2021, p. 23). Perhaps the lockdown and the forced reliance on virtual teaching tools have exposed flaws in the methods and techniques used in higher education to date.

The classroom could be considered an opportunity for students to exchange ideas, debate issues and interact in seminars and group peer-to-peer discussions. This could contribute to the elimination of instruction methods that revolve around the constant reception of information. The theoretical part of education could be taught in online format. In contrast, the physical space of the classroom could be reserved for practical and interactive learning. Perhaps this is the “silver lining” that higher education institutions can extract from the sudden, unexpected shift towards a virtual classroom model. As they could not carry out face-to-face activities in the classroom, teachers and students could think about what they valued and missed most in such interactions. This would serve to strengthen student life once it has attained a certain level of “pre-pandemic normality”.

Taking into account the relevance of the physical environment for the sake of fruitful teaching and learning, higher education institutions must achieve a fair balance between online and face-to-face modes so that they can bring about a healthy, successful hybridisation of their education services. Both teachers and students must have a role in determining how education is imparted, or better put, experienced, from both sides. Technology should not be left to set the rules for how tertiary education will be provided in the coming years. Digital tools are likely to play a proactive role in addressing the challenges posed by the pandemic, but they must not become higher education’s central axis.

Addressing the challenges posed by the pandemic, but they must not become higher education’s central axis.

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1. The labour market today: changes taking place and changes needed

The world of work is being shaped by new global challenges, scientific and technological advances, globalisation, the economy and social changes. The labour market is changing, as are the knowledge and skills needed to enter it. This means that lifelong learning, reskilling, the acquisition of new skills and even readiness to change professional sector have all come to the fore (Woetzel et al., 2021).

The changes that the labour market is undergoing are numerous and diverse. Facer (2021) underlines the following: new technologies have restructured and will continue to restructure employment; women’s participation in the formal economy has increased globally; polarisation between highly paid work and growing mass low-wage work has increased; globalisation has increased the complexity of supply chains; and, finally, there has been growth in informal economies and under- and precarious employment. Likewise, the interaction between these trends is giving rise to related phenomena. Based on the ideas of Graham and Shaw (2017), Facer (2021) explains, for example, that the intersection between precarity and digital technologies is pushing towards the emergence of a gig economy that both “creates new labour markets and transform[s] (some) old ones” and offers “the capacity to exploit and alienate workers in new and innovative ways”. At the same time, according to research by the McKinsey Global Institute (Manyika et al., 2017), 60% of current occupations have 30% of activities that could be automated. Thus, this partial automation has led us to reflect on essentially human contributions and consider how they can be enhanced through education.

In addition, the Covid-19 pandemic has exacerbated many of the existing problems. According to The Economist (2021b), the health crisis “has destroyed millions of jobs, causing a drop in employment that was 14 times bigger than the one after the financial crisis of a decade ago. In many countries unemployment has risen to levels last seen in the 1930s, with the pain concentrated among the low-skilled”. However, The Economist itself offers a contrasting view of this pessimistic outlook. With a focus on the 37 members of the Organisation for Economic Co-operation and Development (OECD),

a club of mostly rich countries, it argues that popular perceptions about the world of work are largely misleading. It points out that the legacy of the pandemic “may be a better world of work, as it speeds changes that were already under way and highlights those places where further improvement is needed”. Specifically, it emphasises the fact that teleworking will offer greater flexibility and, at the same time, make workers more productive. It also predicts that governments will play a bigger role in sustaining employment and reducing inequalities, since the pandemic has highlighted the importance of a healthy labour market.

Against this backdrop of rapid and sometimes entirely unexpected changes, it is difficult to predict what the future of work will look like. This was pointed out by UNESCO (2015) long before the pandemic compounded the instability: “Indeed, the quickening pace of technological and scientific development is making it increasingly difficult to forecast the emergence of new professions and associated skill needs.”

We do know, however, what changes are needed to build a healthy work environment. In this regard, one of the most obvious needs involves putting workers at the centre, because this change will naturally give rise to many others. The movement Democratizing Work: Democratize, Decommodify, Remediate (2017) indicates, first and foremost, that firms must be democratised and highlights the fact that workers “hold the keys to their employers’ success. They are the core constituency of the firm, but are, nonetheless, mostly excluded from participating in the government of their workplaces – a right monopolized by capital investors”. Secondly, it points out that work must be decommodified, “[which] means preserving certain sectors from the laws of the so-called ‘free market’ [and also] ensuring that all people have access to work and the dignity it brings”. Thirdly, it mentions “environmental remediation” by referring to the need for a “successful transition from environmental destruction to environmental recovery and regeneration”. According to this movement, this will be possible only in democratically governed firms, in which all voices are heard when it comes to strategic decision-making. If this does not happen, “labor and the planet always lose”.

The role of women has been and will continue to be a prominent feature of debates about the changes needed in the labour market. With respect to the specific case of

1. See https://democratizingwork.org/
higher education, although women’s access to higher education studies is increasing, a phenomenon known as “female advantage” (see chapter Sustainability), a number of voices have pointed to the lower presence of women in professional positions at universities. According to UNESCO-IESALC (the International Institute for Higher Education in Latin America and the Caribbean) (2021), “women still encounter obstacles when seeking to occupy key academic positions in universi-
ties, to be involved with relevant research, and to take leadership roles”. Moreover, “the so-called STEM areas of study (that is, science, technology, engineering and mathematics), […] show a heavy underrepresentation of female students in most countries. This underrepre-
sentation of female students is then closely linked to the underrepresentation of female researchers in these fields” (UNESCO-IESALC, 2021). The reason for this is that “cultural structure and stereotypes have helped identify careers as female or male, therefore increasing the gap” (UNESCO-IESALC, 2021b).

The labour market is not only critical to ensuring that everyone can cover their basic needs, it is also crucial for the development of the individuals within society. Accommodating it properly should represent one of the main goals of higher education institutions (HEIs). In this context, the new skills demanded by today’s labour market are presented below (Section 2). These skills are linked to a paradigm shift in the way we understand learning (Section 3), as well as to an expansion of learn-
ing moments and environments: lifelong and lifelong learning (Section 4). Finally, Section 5 of this chapter asks what role education institutions should play in this new scenario.

2.2 Technical skills

In a constantly and rapidly changing society, UNESCO (2015) stresses the importance of cultivating adapta-
tibility and resilience in the professional area, which “implies ensuring that individuals are more resilient and can develop and apply career adaptive compe-
tencies most effectively. These competencies often include more emphasis on what have been variably named ‘transferable skills’, ‘twenty-first century skills’, and ‘non-cognitive skills’. In his book El trabajo ya no es lo que era (2020), Albert Carigueral anticipates that “the illiterate people of the 21st century will not be so much those who cannot read and write, but those who cannot learn, unlearn and relearn” (quoted in Argemi, 2020).

Based on data from the report SDG 4. the role of com-
panies in achieving quality education2, Riesta Puga (2020) also highlights the importance of “engage in lifelong learning, adaptation, creativity and innovation, and in relational aspects such as man-
gement of emotions, communication, leadership and empathy. With respect to relational aspects, the impor-
tance of prioritising collaboration over competition is a recurring theme (Reiner Mason, 2021).

According to the World Economic Forum (2020), the top 10 skills for 2025 include: (1) analytical thinking and innovation; (2) active learning and learning strate-
gies; (3) complex problem-solving; (4) critical thinking and analysis; (5) creativity, originality and initiative; (6) leadership and social influence; (7) technology use, monitoring and control; (8) technology design and pro-
gramming; (9) resilience, stress tolerance and flexibility; and (10) reasoning, problem-solving and ideation. Most of these refer, broadly speaking, to problem-solving and the others refer to aspects relating to self mana-
gement, working with people and technology use and development.

The Vitae Researcher Development Framework (RDF)3 provides a benchmark for identifying transversal skills; in this case, they are aimed at the research communi-
ty, although they can clearly be broadly applied and adapted to other domains. The Vitae RDF is structured into four domains: Domain A covers knowledge and intellectual abilities; Domain B corresponds to personal qualities; Domain C is related to knowledge of the pro-
fessional standards and requirements to do research, and Domain D concerns the knowledge and skills to work with others to ensure the wider impact of research.

These are just a few examples of transversal skills cited in the literature. As demonstrated, they include a wide and varied range of skills that can be summarised as follows: adaptability and creativity, which are closely related to each other; the ability to solve problems, and the ability to self-manage and relate to others.

The humanities play a major role in the development of transversal skills. While these aspects are addressed in the chapter Citizens, focused on humanities, in this chapter we focus on the digital future of this Report. It is important to note that many of the transversal skills that are, and will continue to be, in greatest demand in the job market are closely related to the humanities, and that one of the reasons for this lies in the phenomenon of automation; machines and robots will perform tasks previously carried out by humans, and humans will be forced to strengthen every aspect that differentiates them from these machines and robots. GUNI (2019) explains this phenomenon as follows:

“As is recognised in the report Work for a Brigh-
ter Future, published in 2019 by the International Labour Organization, […] some of the skills that will be most in demand are related to the humanities, communication, relational and critical thinking. If we think that many activities will be automated, and very much so, in the immediate future, it is obvious that the resulting jobs will have to incorporate other skills and abilities, and these include those linked to and driven by study of the humanities.”

2.2 Technical skills

Both policymakers and international organisations and experts point to mismatches between the training and skills needs of the labour market and the supply of workers with these qualities (Taylor and Burquel, 2021). Given this reality, the SDGs themselves, specifically Target 4.4, stress the need to “substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employ-
ment, decent jobs and entrepreneurship”.

According to the World Economic Forum (2020), there has been “a clear acceleration in the adoption of new technologies […] Cloud computing, big data and e-commerce remain high priorities [...] However, there has also been a significant rise in interest in encryption, reflecting the new vulnerabilities of our digital age, and a significant increase in the number of firms expecting to adopt non-humanoid robots and artificial intelligen-
ce, with both technologies slowly becoming a mainstay of work across industries”. These new technologies are set to drive the future growth of the industry and give rise to new jobs and the need for new skills, explains the report by the World Economic Forum (2020).

The report also presents a list of “cross-cutting skills”, i.e. skills that are in demand across multiple emerging professions. They are as follows: product marketing, digital marketing; Software Development Life Cycle (SDLC); business management; advertising; human computer interaction; development tools; data storage technologies; computer networking; web development; management consulting; entrepreneurship; artifi-
cial intelligence; data science, retail sales, technical support; social media, graphic design, and information management. As is clear, most of these skills derive from
the digital transformation and the implementation of new technologies currently taking place in the world of work; skills related to business management and marketing also feature prominently.

In this context, the concepts of skilling, reskilling, upskilling and micro-credentials have emerged. These relate to training that is closely linked to market demands, is short-form delivered in virtual format. They also evolve a modular approach to knowledge, since they focus on very specific learning intended for a specific task. As defined by Techononline.ca (2021), “Micro-credentials are a key component of many government strategies for upskilling and reskilling. They are designed to help close the skills gap and get people back to work. They also reflect a trend toward on-demand, short-form learning that is focused on skills, competencies and specific capabilities – a shift away from long-form learning, such as degrees and diplomas”.

Although micro-credentials are partly defined by their links to both industry and the academic world, these links need to be concrete and efficient. According to Techononline.ca (2021), in the case of industry, it is important to “link micro-credentials to the in-demand (or soon to be in-demand) skills and competencies employers are actually seeking” and, to ensure that this link is real and effective, the industry needs to be involved in the design of micro-credentials. Moreover, it is crucial to create mechanisms to assure employers that micro-credentials actually train employees in the skills for which they have been designed.

“The key is that employers agree that a specific micro-credential and its assessment provide a sufficient basis for employability.” With respect to links to the academic world, it is important to identify micro-credentials that can be scaled up to undergraduate or postgraduate degrees and that give rise to credits for these degrees.

Internships and work placements also represent effective tools to prepare individuals for entering the workplace, since they provide them with professional experience. As mentioned by EUA (2021), it is also essential that internships and work placements provide a good fit for both the employer and the academic programme: “[They] should be carefully designed within the curriculum, to meet both employers’ demands and academic requirements.” However, in the context of curricular activities, it is important to go beyond internships and work placements to offer “a mixture of curricular interventions, e.g. combinations of internship modules, practical courses and different teaching methods (project-based learning, community-based learning, research-based learning, etc., possibly including real-life based, authentic assessment)” (EUA, 2021). This in regard, the dual training initiatives implemented in many countries represent a useful methodology that favours the hybridisation of academic knowledge and practical knowledge of the workplace.

In a global world, it is impossible to overlook the importance of international experience, even if this is not strictly speaking a technical skill. As indicated by Weimer (2018), “robust research has emerged supporting the assertion that a student’s employability is impacted by their inter- national higher education engagement […] . It’s up to the institution to create rich opportunities and provide tools for students to reflect on and transform their international experience into desirable employability traits”.

Finally, it is important to update skills, but also to ensure that this is accessible for everyone. Woetzel et al. (2021) present the notion of the “three Es” – everywhere, everything and everywhere – in relation to the case of China. According to Woetzel et al. (2021), China will play a key role in determining tomorrow’s global labour market, because “one-third of the global occupational transitions needed for the future of work may be in China”. In this context, the three Es refer to three aspects that are necessary for the transformation of this country and are, in fact, applicable globally. “Everyone” refers to the need for the entire population to acquire the skills they need. “Everything” stresses the importance of addressing cognitive issues, such as critical thinking and decision-making; social and emotional issues, such as interpersonal skills and leadership; and technical skills, such as advanced data analysis. Finally, “everywhere” refers to the need to make education and training ubiquitous and available to everyone throughout their lives.

2.3 Personal responsibility for learning

In addition to acquiring new skills, it is essential to empower students and make them responsible for their learning and, by extension, their career paths: “Addressing employability skills does not only mean enabling graduates to find a job or create one. […] It is about empowering students as self-reflective, lifelong learners, and ultimately developing their personal responsibility for their learning” (EUA, 2021). Taylor and Burqul (2021) also reflect this idea when they refer to the need to place students at the centre of the educational process.

Part 1: New Contexts, New Visions

New Visions for Higher Education towards 2030

Student-centred education implies that students are given the responsibility for their own learning process, setting their own goals and finding their own pathway to become independent thinkers, develop the confidence to learn by discovery (rather than simply to memorise information), acquire lifelong learning skills to deal with 21st century problems and compete in the local and global job market (Taylor and Burqul, 2021).

Meanwhile, Facer (2021) emphasises the importance of nurturing students’ ability to respect themselves and construct dignified work environments for everyone. According to the author, it is necessary to nurture “the capacity for students to respect themselves, identify what constitutes valuable work for themselves and their community and develop the personal and social capacities to organise collectively in order to create conditions in which they are able to conduct such work with dignity”. Within this framework, the importance of group and collaborative work comes to the fore, because “creating viable working opportunities can no longer be seen as the job of the individual in isolation, or the subject simply of individual careers”, but is also dependent on the collective capacity to negotiate fair wages, working conditions and employment rights.

Both Facer (2021) and Taylor and Burqul (2021) also point to the social impact of learning by underscoring the social, skills capacities and valuable work individuals can bring to the community. By linking their educational and professional journey to civil society, students’ empowerment capacities concern interpersonal skills and leadership and, by extension, their career paths: “The far-reaching changes affecting the professional world, and society in general, have extended to the education system. This is becoming evident at a time when neuroscience is undergoing significant advances that are having a major impact on education. In short, neuroscience offers an insight into the brain functions “to better understand the interactions between biological processes and human learning” (UNESCO, 2015). As David Bueno explained in an interview with Ferragut (2019), we used to see the long-term results according to the strategy used, whereas now we can see what is happening in the brain, which allows

3. A paradigm shift in the way we understand learning

The far-reaching changes affecting the professional world, and society in general, have extended to the education system. This is becoming evident at a time when neuroscience is undergoing significant advances that are having a major impact on education. In short, neuroscience offers an insight into the brain functions “to better understand the interactions between biological processes and human learning” (UNESCO, 2015). As David Bueno explained in an interview with Ferragut (2019), we used to see the long-term results according to the strategy used, whereas now we can see what is happening in the brain, which allows

4. See https://jarche.com/pkm/
Another matter of ongoing debate relates to the question that gives meaning to the question, the problem and is therefore necessary to place students in the context since knowledge provides the answer to problems, providing students, professionals and academics with tools for better knowledge integration and promoting scientific, technical, personal and professional development (Llano Arama et al., 2016). Thus, in the field of learning, interdisciplinarity is embodied in “the teaching of the interrelationships between all parts of the universe, such that students do not learn in a piecemeal way when being taught things that occur in an integrated manner in real life” (Llano Arama et al., 2016).

Memory, which always plays a key role in traditional education, also takes centre stage in this new paradigm. According to the philosopher Gregorio Luri (University of Barcelona), exposes that a distinction must be made between explicit and procedural memory: “memory is not a stable job for life. Learning does not end with a university degree is not a guarantee of a job, much less a stable job for life. Learning does not end with a degree, and it is this idea that underpins the concept of lifelong learning. As pointed out by EUA (2021), “While a university degree is needed and appreciated by employers, that degree education may no longer...
be sufficient to ensure employability throughout one’s lifetime”. UNESCO (2015), meanwhile, stresses that “lifelong learning is critically important to coping with new employment patterns and achieving the levels and types of competencies required by individuals and societies”. Fitò (2020) also refers to this concept: “In this new scenario, the limited life span of education no longer makes sense; the current challenge for universities is to promote people’s empowerment and their ability to adapt to permanent change.” In this context, lifelong learning must become a right. As Roca (2021) puts it, “It is no longer enough to say that lifelong learning must be a functional necessity; rather, it must be an inalienable right of everyone: the right to lifelong learning”. Moreover, several authors stress the importance of establishing ties throughout the learning process, from childhood to adulthood. In this regard, the MCU (2020) portrays higher education institutions as part of a continuum: “Education is a human right, a public good, and should be available to all. Universitarians recognise that learning is a lifelong activity with tertiary education as one part of a continuum. Within that one part, universities serve diverse learners at all stages of their lives.”

5. The role of HEIs: reducing tension and becoming part of the ecosystem

It is essential to establish “a series of transformations that will turn the training-based vocation of higher education into a clear employability-based approach”, says Fitò (2020). It should be noted, however, that this vital link between higher education institutions and the professional world creates two types of tension: firstly, with the academic character that has defined universities over the centuries and, secondly, with the need to turn students into critical, free citizens as well as professionals.

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1.3 Citizens. Promoting humanist values and profiles in a changing world
1. Redefining the human experience: the pathway to change

The race to have more, earn more, achieve success and be the best has shifted the focus from the individual as part of a group towards competition between members of the group. We accumulate things instead of sharing them and we compete against each other instead of cooperating, all based on the belief that our resources are unlimited.

The world we inhabit is facing vast imbalances and profound changes: the climate emergency is calling the production system into question; political crises are emerging everywhere, sometimes giving rise to authoritarian governments and diverse wars; the Covid-19 health crisis has taken precedence over everything and everything else has been put on hold, thus casting doubt on many of the models used to govern countries and the relationships between them; advances in science and technology are making it imperative to carry out joint reflections on the impact of the new paradigms that are emerging, we are advancing an ever-increasing rate, but the signs of a sick society are everywhere. These changes, which are caused partly by individualistic zeal and excessive accumulation, require that the human experience be redefined and a new relationship between humankind and the environment be created. As GUNi explains (2019):

These [societal] changes are presenting trans-cendental challenges in terms of thinking and rethinking the meaning and value of human experience, and even of what it means to be human, as individuals and in relation to other people and with nature, now and in the future, and so we need to reflect critically and rationally, including from human emotionality (GUNi, 2019).

Against this backdrop, people are sounding the alarm about the risks of abandoning cooperation in favour of competition, since it has destroyed the ethical structure that humanity has been building for millennia. The concept of freedom has been used as an excuse to set limits on these capabilities (GUNi, 2019). As explained by philosopher Adela Cortina, a professor of ethics at the University of Valencia, “With a universalistic ethical attitude […] the cut-off for decision-making is the universal good, even if it needs to be built from a local level and, even more urgently, from the bottom up, by educating the younger generations in a global ethic” (included in De Paz Abril [2007]). Higher education institutions are also being called upon to adopt a key role in building this new paradigm, and the way forward also involves giving voice to the humanities. The humanities have enormous potential in this regard (Section 5), because they offer a more in-depth understanding of the environment, others and ourselves.

While the definition of this field is complex, debatable and widely discussed, we can say that “the humanities are made up of a heterogeneous set of knowledge that is combined in order to study and reflect on the human condition in social, cultural and artistic terms” (GUNi, 2019). The humanities are not about old and outdated knowledge; rather, they help us interpret the past, address the present and plan for the future through reflection that is intrinsically linked to humanness (Vilalta, 2020). The definition of the humanities includes “philosophy, language, literature, history, human geography, cultural anthropology, law, politics, religion and all forms of the arts (visual, musical and performing)”, among other disciplines (GUNi, 2019). However, the humanities cannot be segregated into watertight disciplinary compartments or addressed in isolation, instead, they must be understood from a dynamic perspective and as part of a systemic relationship with science, technology and other fields within the framework of so-called knowledge ecosystems.

In light of all this, the following proposal recommends that higher education take on the challenge of shaping future citizens in the following three areas: interacting with the environment in a coherent and sustainable manner (Section 2), building constructive relationships with other members of the community (Section 3) and living a full life (Section 4).

2. Learning to integrate into the environment

Redefining the human experience must involve establishing a sustainable relationship in harmony with the environment. The environment is the planet we inhabit. When we imagine a possible future, we cannot separate humans from the rest of the planet; rather, we must understand humanity as part of a larger system, the biosphere (Section 2.1). The environment is also the series of contexts in which our lives are immersed: the workplace, community, etc. These contexts are fluid and complex and, in this fast-moving reality, force us to learn to live with uncertainty (Section 2.2). Through observation and analysis and experience, the humanities help us learn about and understand this environment and, therefore, provide us with the tools we need to develop within it.

2.1 Humanity as part of the biosphere

The report Learning: The Treasure Within, also known as the Delors Report (Delors et al., 1996), proposes that learning be built on four pillars. Learning to know, learning to be, learning to live and learning to work. According to UNESCO (2015), these pillars require modification due to growing concerns about sustainability: “Learning to live together, for example, must go beyond the social and cultural dimensions of human interaction to include a concern for the relationship of human society with the natural environment.”

At the same time, new schools of humanist thought have emerged, some of which have been classified as the environmental humanities, which focus on the relationship between humankind and nature for the sake of sustainable development. The environmental humanities are characterised by a “connectivity ontology based on the need to integrate human development into ecosystems. Or, put another way, to adopt ecological, economic and social sustainability as a paradigm for development” (GUNi, 2019). As Sirenenova Lovino, a professor at the University of North Carolina at Chapel Hill, explained at the European Humanities Conference held in Lisbon in May 2021:

The environmental humanities are animated by the ambition of intervening in the understanding as well as in the ethical reframing of inhabiting the world. […] The environmental humanities are animated by the idea that our species as well as our planet are not ‘lonely’ but are always already in a deep inter-change. This implies that every form of politics must take into account this mutual belonging, this multiplicity, as well as the gaps of injustice among different species, or among members of the same species: ours.

The concepts of the environmental humanities are also addressed by UNESCO (2020), which makes specific proposals for education in the post-COVID era. The health crisis is “the latest in a series of developments which show us that our humanism cannot be as narrow as it once was. We cannot separate humanity from the rest of the planet and this must be born in mind as we work to shape desirable alternative futures”.

2.2 A complex and uncertain world

If there is one adjective that keeps cropping up when defining the phenomena and contexts in which we are immersed, it is ‘complex’, there is talk of the complex reality, complex social challenges, complex professions, and so on. “Uncertain” is another word that is repeatedly used to define today’s world. The world is uncertain, but we try to comprehend it, to grasp it. “Long before the pandemic hit, we lived our lives worried about safety and obsessed with avoiding all risks, which made us slaves to prevention. We clung to the certainties and dogmas that thwart any peaceful quest for the truth” (Jolonch, 2021). Modern living requires that we embrace a multifaceted, changing reality, and higher education institutions must provide the tools needed to inhabit it and, even more importantly, to grow through it.

Complexity, for example, requires a transversal approach in which the boundaries between disciplines are blurred and the humanities play a key role. At the third International Congress of Neuroeducation, Marina Garcés (2021) spoke about uncertainty and stressed that educational institutions must guide their students toward knowledge and wisdom, but also in their uncertainty and lack of knowledge; she also called upon teachers and students to learn to get lost together and to be unafraid to do so.

One of the most widely discussed subjects is how to deal with complexity and uncertainty in the workplace (see the chapter The future of work), and higher education must ensure that the employees of the future have the skills that are needed, such as knowledge of the context, society.
Service and hospitality are essential for the construc-
tion of this network, and must be entrenched in all
higher education bodies, processes and programmes
and, above all, in the classroom. Marina Garcés (2021)
defends the need to make education into the art of hos-
terality and to accommodate others’ existence in the
learning process, along with everything that defines
and characterises this. We must learn to accommodate
and serve others, and we must put the perception of
universities and the people who form them at the fore-
front, as a service to society.

Furthermore, it is important not only to understand
coexistence in terms of the immediate environment,
but also to recognise this sense of coexistence on a
global level, while eschewing centralist and neocolo-
nialist perspectives. This is one of the ideas explored
by Nussbaum (2018), who focuses on the need not only to
recognise a global, diverse and plural citizenship, but
also to take responsibility for it.

Citizens who cultivate their humanity need, further,
an ability to see themselves as not simply citizens
of some local region or group but also, and above
all, as human beings bound to all other human
beings by ties of recognition and concern. [...] We
neglect needs and capacities that link us to fellow
citizens who live at a distance, or who look different
from ourselves. This means that we are unaware of
many prospects of communication and fellowship
with them, and also of responsibilities we may have
to them (Nussbaum, 2018).

The humanities are important allies to bring about
these bonds; to create networks for enrichment and
commitment to others; to build a diverse, global
community that rejects centralist perspectives; and,
ultimately, to focus on the development of the citizens
of the future.

3.2 Coexistence, difference and diversity

Living together involves surrounding ourselves with
different ways of thinking and acting. If we broaden
our field of vision and look at the world as a whole, these
differences expand and multiply. Democratic societies
must be able to accommodate this diversity, accept
these differences and incorporate conflicting ideas peace-
cfully. However, in a highly polarised world fuelled by
the phenomenon of fake news, this is becoming increa-
singly rare. As UNESCO (2020) warns, “The spread of
misinformation and fake news [...] is now proving fatal
for social life and human understanding, but is also
literally destroying lives”. The rise in fake news is parti-
cularly evident in social media, where bubbles inhabited
by people who share the same ideas are created; these
identities expand and multiply. If our institutions of higher
education do not build independent views and needs for self-esteem. But
in order to avoid instilling an overly stubborn attitude among
students, they should also be trained in self-distanci-
ence and suspicion of their own truth-holdings.” This
critical view of one’s own ideas is vital to embracing
a common truth, which will be subtle, full of nuance
and constantly transforming.

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textual relevance would also stem from research being able to move away from the current pattern whereby scientific communities and networks are dominated by a small number of HEIs that have historically had the power to define scientific norms and influence the types of research that are conducted (UNESCO-INESCALC, 2021).

To recognise multiple epistemologies and expressions of knowledge and, even before that, to allow these epistemologies to be formulated and disseminated, it is essential to acknowledge linguistic diversity and the richness of languages as the content of, and contingent upon, knowledge and cultural heritage. In the framework of the Information for All programme, UNESCO (2021) states:

Languages are unique tools that enable people to comprehend and describe the world, communicate and transmit knowledge; they are repositories of historical and social experience of nations, and act as socialization factors and means of human self-identification. However, almost half of the world’s languages are facing the risk of extinction, while still more languages are facing the risk of losing their role in many fields UNESCO (2021).

Within the field of education, languages and linguistic diversity lie at the heart of the debate on the quality of learning, personal development and knowledge creation. “Research shows that mother tongue-based bilingual or multilingual education has a positive impact on learning and learning outcomes” (UNESCO, 2014). Therefore, enabling meaningful and relevant learning implies protecting every language and giving it recognition as a vehicular language in education. At the same time, endangered or minority group languages are being preserved and promoted through multilingual education, thereby safeguarding cultural richness and the world’s linguistic and cultural diversity.

4. Learning to explore the individual

One idea that surfaces repeatedly in discussions about the future of education is the importance of cultivating the traits that make us human: “Being uniquely human” (Alfonso Cornelii, third International Congress of Neuroeducation), “learning how to be a human being capable of love and imagination” (Nussbaum, 2018), “[developing] abilities that are exclusive to the human condition” (Federico Mayor Zaragoza in GUNI, 2019), “the development of the whole person not just academic skills” (UNESCO, 2020). This idea gathers even more momentum in discussions on the rise of artificial intelligence, in the words of Cornella, “in a world with intelligent machines, our best option is to be human.” This appeal to cultivate what makes us human places individuals (Section 4.1) and their emotions (Section 4.2) at the centre of the educational process.

4.1 Focus on the individual

Today’s higher education institutions face a wide range of challenges, including disengaged students (Rouhainen, 2019). Many students skimmed over content and activities in the classroom. The main goal of their presence in the classroom is to pass a subject or earn a degree. They approach their training from a professional point of view – which is no bad thing – but they are disconnected from anything deeper, what might called their purpose in life or their vocation.

Our vocation is the intersection between our calling, understood as our true passion, and service to society: “Education should encourage us to explore our purpose in life, and should not assume that we have arrived at university with a clear vision and that we simply need to be taught how to achieve it” (Lozano, 2020). Several authors have highlighted the need to explore this calling and fulfill it. According to UNESCO (2020), “It is important to develop a strong base of knowledge about the world and oneself and about the world and oneself, to allow each of us to find purpose and be better able to participate in social and political life.” In an article that focuses on historically black colleges and universities (HBCUs), Reinert Mason (2021) explains that the culture of service that is prevalent in many HBCUs “helps students look outside of themselves to find their passion and their purpose”.

It is important to stress that our understanding of purpose and vocation is broad and can include interests that vary greatly in terms of nature and intensity. However, sometimes it might be more appropriate to refer to vocations, in the plural. Far from being restricted to people with a very clear, one-way mission in life, these concepts must be within everyone’s reach, because everyone has passions that push them in one direction or another.

Students who are disconnected from the training process are the product of a profound disconnect between education and these vocations. It is essential to rebuild these links so that any changes to be made for society start with the individuals who form part of it. Seen from another point of view, it is vital to consider the group and the environment in this search for individuality and genuineness to escape the all-too-common tendency to play individual rights off against collective rights.

4.2 The role of emotions

It is now commonly accepted that we can only learn if our emotions allow it. However, western culture has traditionally underestimated emotions as a source of knowledge and considered them inferior, far less important than ideas and abstract reasoning (Subbrats, 2021). Some authors point to the need to avoid resorting to overly cognitivist and rational models and to approaching feelings in a more genuine way: “Ever since we started talking about emotional intelligence and then later about emotional education, [...] emotional education has been applied on the basis of reason, whereas neuroscience has contributed significantly and tells us that emotions are felt. We don’t think, we feel” (Timoneda, 2021).

Art, painting, literature, music, theatre, film, photography, sculpture, etc., play a central role when focusing on emotions. Riesta Puga (2020) explains that artistic and creative processes represent a transversal educational tool over the walls and doors, not only to connect with emotions, but also to focus on other skills such as observation, reflection, imagination and the search for solutions: “Creation connects us with ourselves and others in an experience that brings emotion and learning together. And that’s exactly what education needs look outside of itself, which is definitely the best stimulus to learning.”

If students learn from emotion, they can acquire the tools they need to structure not only their knowledge, but also their life balance, and they enjoy themselves in the process: “Education based on emotions seeks wisdom linked to enjoying life to the fullest, in conjunction with the enjoyment that is achieved with the acquisition of learning” (De Alonso Paz, 2021). Indeed, the pursuit of this well-being is one of the priorities, along with human interaction, set out by UNESCO (2020) for the future of education.

5. The humanities today

Humanities, “made up of a heterogeneous set of knowledge” and disciplines (GUNI, 2019), provides us with tools to observe, analyse and interpret the context around us; it encourages us to explore ourselves through art, creation and emotions; and it enables us to communicate, collaborate and create networks for coexistence. Because the humanities are not always directly linked to productivity and the goals of a market that governs us, however, the field has been overlooked by higher education and education in general. Martha Nussbaum calls this phenomenon whereby the humanities and arts are disappearing “from both the curriculum and the hearts and minds of parents and children” a silent crisis of education and warns that “this passion for profit in the global market means that we run the risk of losing precious values for the future of democracy” (Nussbaum, 2011, p. 16). However, she points out that both economic interests and the promotion of citizenship require the same skills, which are rooted in the humanities, so it is necessary to connect knowledge and forms of education “to promote a climate of responsible and attentive management and a culture of creative innovation” (Nussbaum, 2011, p. 26).

In reference to the report Change and Cohesion Towards 2030: Humanistic Initiatives from the Danish Association of Masters and PhDs, Myklebust (2021) stresses the importance of including humanities scholars in discussions on seven thematic areas: future climate solutions; cultural and unity challenges; responsible and responsive management and technology in higher education; democratic values and digitalisation; family welfare and gender equality; better health communication and greater equality; and active intervention against religious polarisation. In addition, echoing the words of David Buditz Pedersen, Myklebust (2021) says, “Now is the time to convince policy-makers that the humanities are making important contributions to society, democracy and policy-making across complex challenges such as health, climate, security, education, digitalisation and democracy” and adds that “most public decision-makers are indoctrinated with a blind belief that the economy and the market are the most suitable tools for making prognoses for rational behaviour. But the truth is that democracy is a much stronger mechanism for creating sustainable and responsible changes.”

In this context, it is necessary to study how the humanities can meet current needs, rather than clinging to them as if they were the saviour of all today’s evils or hanging onto a nostalgic vision of what they used to be. It is necessary to interweave them with modern needs and, from there, reflect on the role they should play in higher education.

We go beyond these two opposing extremes, for we are working from the idea that humanities are neither a residual heritage that needs to be protected, nor a drug or a remedy to counter the devastating effects of other areas of society. Quite the contrary, the humanities are part of making sense of human existence and our shared experience and, therefore, of the political and social lives of contemporary societies, within them, between them and in their relationship with the natural environment (GUNi, 2019).

In this context, it is important to explore what traditional elements of the humanities must be brought into today’s classrooms and what new elements must be incorporated. The path of humanistic culture must not only not be lost; it must be restored and expanded so that traditional content and new content can travel the path together. Traditional content encompasses the classic literary and philosophical roots, passion for freedom and, at the same time, for social commitment, and strong ethical values and public-spiritedness. New content includes analysis of scientific progress from the Renaissance to the present day, relativistic and quantum physics, evolutionary biology and biomedicine, communications technology and the many fruitful accomplishments of science and technology; the importance of the linguistic turn in contemporary philosophy; and analysis of the great literary, visual arts and musical productions of today. The humanist attitude is not exclusive; it is not opposition to progress, but views it with a critical eye and the ability to marvel. In this regard, it is also important to emphasise the key role of technology in the humanities. The relationship between the digital transformation and the humanities is discussed in the chapter The digital-human future. We must also look beyond the traditional, centuri- ties-old humanism, which was patriarchal, Eurocentric and linked to Christian values. In fact, as GUNi (2019) explains, “Right now, the strongest philosophical, aesthetic, technological and other schools of thought have made a stand either for or against humanism. Hence the debates on trans-humanism, post-humanism, anti-humanism”. In the same Higher Education in the World Report, Prieto and Prats (2019) state that there is a link between knowledge and the patriarchy, as the foundations of humanist notions emerged within the patriarchal framework. Therefore, the main stream sciences, humanities and knowledge were defined from a male perspective.

However, “feminism and gender studies have now for decades been producing and contributing essential work for repairing the damage caused by humanistic patriarchy” (GUNi, 2019). This transformation process transcends debates concerning how many hours should be devoted to these subjects and the specific contexts in which they should be taught. It also transcends methodological disputes. The shift towards depatriarchalised knowledge, free from established patterns of power and hierarchy, required a thorough reassessment and a shift in attitude towards the epistemological paradigm of science, humanities and, by extension, education (Prieto & Prats, 2019). If one issue is clear in discussions revolving around the role that the humanities must play today, it is the need to incorporate these disciplines into the framework of transdisciplinary projects and programmes. In fact, European policies have further strengthened the commitment to interdisciplinarity and the social sciences and humanities. The reality is complex and there is a link between knowledge and the patriarchy, in the World Report, Prieto and Prats (2019) state that the specific characteristics of each knowledge area should be neglected, will be we able to respond to the challenges of the future.

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1.4 Knowledge. Putting research and innovation at the service of social challenges
1. Sustainability in research and innovation: from need to opportunity

Knowledge is emerging as the most crucial factor for progress, well-being and, at the same time, the competitiveness of our societies, to the point that they are becoming so-called knowledge societies (Blindé, 2005). The meteoric pace of vaccine development in the context of the Covid-19 health crisis is a very recent example that demonstrates that knowledge, in the form of research and innovation, is a key component of progress. Moreover, the health crisis has shown that the means of solving these great challenges must involve responsibility, in a global sense, towards the planet and the people who inhabit it, and collaboration. In this regard, YERUN (2020) highlights the importance of extending the Covid-19 experience of collaborative research to other areas:

Research strengths are currently scattered among countries and institutions. Centralising all efforts and research capacity is not an easy task, but it becomes crucial for increasing and speeding up research collaborations. That is the case with COVID-19 research that has witnessed the creation of specific platforms in which all available research outputs are put together. That should be extended to other research disciplines and areas (YERUN, 2020).

Higher education institutions are being called upon to play an essential role in this process, in the framework of progress and innovation ecosystems. Universities must play a leading role to ensure an orderly transition towards these transformations. Achieving all this involves flipping certain aspects of the traditional approach to knowledge and incorporating research and innovation. It is necessary, in the first instance, to build bold, stable bridges between science and society (Section 2). It is also necessary to put in place the means to transform knowledge into innovation (Section 3). Addressing future challenges requires entrepreneurial, transdisciplinary universities (Section 4). Moreover, sharing and cooperating in research and innovation, and opening up to the world (Section 5), is as attaining importance to all matters that go beyond traditional research through renewed assessment criteria in the academic field (Section 6).

2. Building bridges between science and society

The gap between scientific development and society has been a latent challenge for decades. Many voices are calling for society to become more involved in research and innovation; for social actors and civil society to become involved in the decisions that define the fields and direction of research and innovation for sustainable growth. Universities must play a fundamen-

tal role here, as highlighted by EUA (2021): “Europe’s universities will make human-centred innovation their trademark, aiming to achieve sustainability through cooperative models.”

Within this framework, Ferrer-Balas (2011), in reference to a proposal by Gibbons et al. (1994), made a distinction between Mode 1 science and Mode 2 science. For Mode 1 science is academic, investigator-initiated, discipline-based and underpinned by knowledge production. Meanwhile, Mode 2 science, which emerged in the mid-20th century, is context-driven and problem-focused. These problems are characterised by uncertainty and complexity, and require collaborative and transdisciplinary work. In this regard, Messerli et al. (2019) highlight that competition and meritocracy must be put aside to work in a cooperative way, and point out “the urgently needed shift from individual – and individualistic – research modes to cooperative transformation-oriented approaches”.

Lafuente (2020) also discusses this topic in reference to the fact that Covid-19 has highlighted the need for a new social pact for science: “What society demanded of scientists [...] was no longer reliable knowledge in exchange for resources to ensure their independen-

tce of judgement. What society required for the new millennium was a declaration of their willingness to take charge of the world’s problems.” The work of scientists must serve to promote peace and the public good and redress asymmetries: As highlighted by the author, “The innocence party was over for scientists.”

This desire has taken shape in several initiatives in recent years. In 2014, the Rome Declaration on Responsible Research and Innovation defined RRI as “the ongoing process of aligning research and innovation to the values, needs and expectations of society.” It also stated that “RRI requires that all stakeholders inclu-

ding civil society are responsive to each other and take shared responsibility for the processes and outcomes of research and innovation” (GUNI, 2017). RRI has become a key concept in the international arena, along with open science, citizen science, sustainable science, science with and for society (Swafs), participatory research and co-creation.

Closfer integration between science and society and, more specifically, between the different stakeholders calls for interdisciplinary relationships in which the other point of view is taken into account, shared values are, therefore, vital. In citing several authors, Werker (2020) explains that, in RRI, jointly acceptable solutions in research and innovation must be based on shared values:

- Developing shared values about the process and outcomes of research and innovation requires integration of the values of all relevant stakeholders [...]. While the values of stakeholders can substantially differ, shared values exist, for example, that stakehold-

ers eventually agree on them (Werker, 2020).

Another initiative that aims to raise awareness of the con-
tribution of research and innovation to the challenges facing society today are so-called Missions, a new component of the Horizon Europe programme. As explained by Mazzucato (2018), “Mission-oriented policies can be defined as systemic policies that draw on frontier knowledge to attain specific goals”. According to the same author in a later publication, “Rather than focusing on purely technological problems, we can focus inno-
vation efforts to solve societal challenges that involve technological change, institutional and behavioural change and regulatory change” (Mazzucato, 2019).

The manifesto Knowledge, Action and Hope, presented by the UNESCO Chair in Community Based Research and Social Responsibility in Higher Education (2021), makes numerous references to the creation of bridges between science and society. It advocates, for example, for “deepening our understanding of knowledge demo-

cracy as a fundamental framework for transformative change”, as well as “increased opportunities for all stu-
dents to be able to learn about democratic approaches to research in theory and in practice”. Moreover, it supports the creation of structures and policies to incorporate community-based research as an integral part of academic careers.

It is also worth highlighting a series of movements that are helping change society’s role in the field of inno-

vation. Science Shops, for example, are defined by the International Science Shop Network (Living Knowl-

dge, n.d.) as “small entities that carry out scientific research in a wide range of disciplines – usually free of charge – on behalf of citizens and local civil society”. This network also explains that “the fact that Science Shops respond to civil society’s needs for expertise and knowledge is a key element that distinguishes them from other knowledge transfer mechanisms”. A second initiative is Fab Labs, which, “from community-based labs to advanced research centers, [...] share the goal
of democratizing access to the tool for technical inven-
tion” (Fabfoundation, 2022). Meanwhile, the Maker
Movement (Xataka, 2018), whose motto is “Do it your-
self. Do it Together”, is a movement that brings together
people with diverse profiles who are interested in tech-
nology and open source.

3. Turning knowledge into innovation

Research is an activity that naturally drives innovation,
since it involves new, more efficient solutions to social
or business-related problems and demands. Within this
framework, it is widely accepted that striking a balance
between knowledge generation and innovation capa-
city is crucial, although transferring research results
and knowledge to innovation and the development of
responses to societal challenges is often complex. In
contexts with a shortage of research, it is virtually
impossible to find examples of knowledge transfer and
innovation. However, in contexts such as Europe, where
a large volume of research is available, the reality is that
a balance has still not been struck between knowledge
generation and innovation capacity.

In the Green Paper on Innovation, the European Com-
mission encapsulates the concept of the European
paradox, which reflects Europe’s failure to transfer its
leadership in research to innovation. Almost 30 years
later, the European paradox has not been resolved and
variations have emerged, including the European AI
paradox, which refers to the fact that, although Europe
continues to play a leading role in artificial intelligence
on an academic level, none of the major AI companies
is European, explains Almirall (2021).

Transfer and innovation lie at the core of current Euro-
pean policies in an effort to reverse this trend. In this
context, the knowledge economy has the potential to
develop new ideas that are not yet acknowledged by
entrepreneurial, and the crossover between knowledge
areas and actors within the system.

An example in this regard lies in the RUNIN project (The
Role of Universities in Innovation and Regional Devel-
oment [2022]), which focuses on training academics on
how universities can contribute to “innovation and
economic growth in their regions through research
seeking to examine how universities fulfill their third
mission in relation to regional industry and explore
the range of university engagement with regional
firms and institutions”.

In addition, one of the new components of Horizon
Europe, the EU research and innovation framework
programme (2021-2027), is the European Innovation
Council, which provides support for “innovations with
potential breakthrough and disruptive nature with scale-up potential that may be too risky for private
investors” (Directorate-General for Communication, n.d.). Almirall (2021) highlights the need to welcome
these risky projects when he explains that, in relation
to applied research centres, “it is difficult to run radical
innovation projects and also long-term projects that fall
outside the time frames set by industry”. Thus, innova-
tion agencies are seen as playing a vital role in leading
projects that do not arise naturally in industry, but can
have an impact on the desired future. This idea is also
reflected by EUA (2021), which states that universities
must also make room for “lateral thinkers, who test and
develop new ideas that are not yet acknowledged by
fellow researchers or by society at large”.

In short, the knowledge economy has the potential to
foster the continued creation of research and its trans-
fer to innovation, to that end, industry and science
policies must be aligned, so that the demand for
knowledge drives research and research gives rise to
innovation development.

4. The new university: entrepreneurial and transdisciplinary

“The role of the university has continued to evolve
along with the underlying economic forces shaping
economic growth and performance.” According to
Audretsch (2014), the university is one of society’s most
resilient institutions due to its “ability to both adhere to
its traditional strengths as well as adapt to the needs
and concerns of society”. Within this framework, the
author presents the concept of the “university for the
entrepreneurial society”, which emerged from the link
between universities and companies, between research
and innovation. A parallel concept would be, for
example, “academic entrepreneurship”, which seeks
to define the new entrepreneurial dimension of univer-
sities (Galvao et al., 2019).

According to Audretsch (2014), with the emer-
gence of the “entrepreneurial economy”, where
entrepreneurship is the driving force behind econo-
mic growth, “just undertaking scholarly research in
basic disciplines did not suffice in generating sufficient
knowledge to contribute to economic growth and per-
formance”. The result, in the first instance, was the
“entrepreneurial university”, which aimed to “create
new interdisciplinary fields and research areas devoted
to providing solutions to specific societal problems and
challenges”. In particular, the entrepreneurial universi-
ty aims to create innovative companies and promote
knowledge transfer from universities to companies in the
form of patents and start-ups.

The entrepreneurial economy was followed by the
trepreneurial society: “While the entrepreneurial
university has a mandate to facilitate the commerzia-
ization of university research and generate startups
and new ventures, the role of the university in the enter-
preneurial society is considerably broader and more fundamental – to provide thinking, leadership
and activity to enhance entrepreneurship capital.” What dis-
tinguishes the university in the entrepreneurial society
from the entrepreneurial university is the scope of its
mission, which is more global and inclusive.

Integrating universities into the entrepreneurial society
requires, firstly, the involvement of the entire institution
and, secondly, transdisciplinarity. In this regard, Audretsch
(2014) explains that “something of a dichotomy
emerges for the entrepreneurial university with certain
parts of the university contributing to the commerciali-
ization mission while other parts alienated or at least not
participating in this mission”. By contrast, with respect
to the university’s contribution to the entrepreneurial
society, “many if not most aspects of the university con-
tribute to the generation of entrepreneurship capital,
even if not explicitly through an orientation enhancing
and celebrating freedom of inquiry and creativity but
also with an awareness these values have beyond the
walls of the university”.

Closely related to the idea of the entrepreneurial uni-
versity is the concept of the transdisciplinary university.
These two concepts have different perspectives and
different mechanisms, but both seek transversality,
coordination and cooperation, and a global, inclusive vision of the world’s
problems with a view to finding solutions. Moreover, both
strive for a profound transformation that must be pro-
gressively implemented in higher education and HEIs.

As Max-Neef (2005) explains, the structure of the vast
majority of university faculties, departments and
centres revolves around isolated disciplines. This
encourages a single-discipline approach to training,
especially at undergraduate level. Likewise, the concept
he calls the “transdisciplinary university” does not exist;
instead, the best-case scenario is that interdisciplinari-
ty is expressed in isolated and/or marginal experiences
and efforts, rather than in an comprehensive change in
the university structure.

Max-Neef (2005) defines transdisciplinarity as a
pyramid: at the base are empirical disciplines (“what exists”) such as physics and sociology; immediately
above is another group of disciplines that constitute the
pragmatic level (“what we are capable of doing”),
including engineering and agriculture; the third is the
normative level (“what we want to do”), which
includes disciplines such as politics and environmental
design; finally, the top of the pyramid corresponds to a
value level (“what we should be doing”, “what we want to do”) and is occupied by subjects such as
philosophy and theology. In a simplified, practical
application-based vision of transdisciplinarity that
the author calls “weak transdisciplinarity”, this is the result of
coordination between all hierarchical levels.

The complexity involved in our relationship with the
world requires complex and inclusive thought that only
transdisciplinarity, understood here as “strong transdis-

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Within this framework, the open sharing of scientific knowledge are two of the pillars of open innovation, open science (UNESCO, 2021). Within this framework, the open sharing of scientific knowledge are two of the pillars of open innovation, open science (UNESCO, 2021). Within this framework, the open sharing of scientific knowledge are two of the pillars of open innovation, open science (UNESCO, 2021). Within this framework, the open sharing of scientific knowledge are two of the pillars of open innovation, open science (UNESCO, 2021). Within this framework, the open sharing of scientific knowledge are two of the pillars of open innovation, open science (UNESCO, 2021). Within this framework, the open sharing of scientific knowledge are two of the pillars of open innovation, open science (UNESCO, 2021). Within this framework, the open sharing of scientific knowledge are two of the pillars of open innovation, open science (UNESCO, 2021). Within this framework, the open sharing of scientific knowledge are two of the pillars of open innovation, open science (UNESCO, 2021).

5. Opening up science and innovation

If we want a future society that is human, liveable and, ultimately, sustainable, we must think beyond global information and knowledge societies to become societies of shared knowledge (Bindé, 2005). Shared knowledge needs to play a key role in the development of research and innovation capacities in a world that must be egalitarian and respectful of the environment.

On this basis, open science was conceived and has evolved in recent years alongside open innovation, which helps exploit the results of the former with a view to creating socioeconomic value. Open science and innovation are gaining momentum due to their convergence with another global trend, the emergence of digital technologies (see the chapter The digital-human future), which are making mass participation and collaboration possible. This is indicated by the European Commission (2016), “the speed and scale of digitalisation are [...], enabling new innovation processes and new ways of doing business, introducing new cross-sector value chains and infrastructures”.

The basic principles of open science and innovation are broadly shared. They include open access to knowledge, access to shared research and innovation infrastructure, cooperation within the framework of knowledge ecosystems, and promotion of diversity to grow together and to grow better.

Open access to scientific knowledge (scientific publications, open research data, open source software and source code, and open hardware) and dissemination of scientific knowledge are two of the pillars of open science (UNESCO, 2021). Within this framework, the European Union and several national funding agencies have made open access a prerequisite for the scientific publications they finance. In addition, Horizon Europe also refers to its open science policy as mandatory open access to publications and the application of open science principles throughout the programme (Directorate-General for Communication, n.d.).

In Universities without walls: A vision for 2030, EUA highlights the need for HEIs to support non-commercial publishing systems by proposing the following scenario:

Universities will support a diverse non-commercial publishing system and will, themselves, be directly involved in such a system, by promoting and supporting non-commercial and smaller publishing initiatives. Data and other outputs resulting from research will be made Fair (Findable, Accessible, Interoperable, Reusable) (EUA, 2016). It is also worth highlighting that open science has been incorporated into research practices, thereby encouraging a shift in the approach to research activity, from a desire for rapid and exclusive publication towards a tendency to share results and data in stages prior to the final publication (European Commission, 2016).

YERUN (2020) highlights the impetus given to shared knowledge in the context of the pandemic and stresses the need to extend this practice beyond Covid-19 research. The opportunities created by open science have been demonstrated and momentum towards this approach is already a reality. Institutions and policy-makers need to provide resources and invest in training in order to incorporate these with a view to fully and effectively implementing it.

In terms of infrastructure, one of the current goals of the European Research Area is precisely to improve access to excellent facilities and infrastructure for researchers across the EU. In this regard, the European Commission (2020) describes the inequalities between member states in terms of research and innovation, which give rise to gaps in excellence, knowledge transfer and innovation that must be bridged.

Manya Gabriel, Commissioner for Innovation, Research, Culture, Education and Youth at the European Commission, recently advocated for the importance of cooperation within the framework of the ERA:

We live in times when scientific activities require faster and effective collaborations. We need to strengthen the European Research Area. An area embracing all of Europe, because knowledge has no territorial boundaries, because scientific knowledge grows with collaborations, because knowledge is trusted if there is open scrutiny of its quality (European Commission, 2020).

In this regard, the objective of open innovation is to allow all stakeholders in the innovation process to participate so that knowledge can enjoy effective freedom of movement and translate into products and services for new markets, thereby encouraging a culture of entrepreneurship (European Commission, 2016). It should be noted that the concept of open innovation is constantly evolving and is moving from linear, bilateral transactions and collaborations towards dynamic, networked, multi-collaborative innovation ecosystems. This means that a specific innovation can no longer be seen as the result of predefined and isolated innovation activities, but rather as the outcome of a complex co-creation process involving knowledge flows across the entire economic and social environment (European Commission, 2016).

All actors, whether public or private, whether in academia or business, whether public authorities or civil society, are called upon to participate in this process, with a constant focus on the needs of society and the world we inhabit. In this network, it is vital to create a citizen/user-centred approach, as “an invention begins in an individual mind” and “value creation process” (European Commission, 2016).

Another key issue in this path towards the development of shared knowledge systems is the focus on diversity, especially in terms of pluralism in geographical sites and modes of knowledge production as fundamental building blocks for inclusive societies (UNESCO Chair in Community Based Research and Social Responsibility in Higher Education, 2021). UNESCO (2021) to the need to initiate dialogues to promote the inclusion of knowledge from traditionally excluded sectors such as indigenous knowledge. The future must involve opening up science and innovation so that it takes place in an environment of cooperation and shared progress. And, in this framework, universities and higher education institutions can exercise power and play a unique role (Ayns, 2021).

6. Assessment: beyond the metrics

While assessment has been based increasingly on quantitative parameters, such as the number of publications, impact factor and global rankings (Hicks et al., 2015), indicators should never replace expert judgement and qualitative assessment. Rather, indicators should be used to support the assessment process, which must address aspects such as scientific integrity, creativity and the contribution to science and society. Given the increased power of data over the direction of science, it is necessary to stress that decisions must combine the robustness of statistics and metrics with qualitative attention to the objectives and nature of the research being assessed (Hicks et al., 2015).

In this regard, Khoo (2021) calls into question excellence as we understand it today in the academic field, since “excellence is over-reliant on global measurement, rankings and league tables which drive excellence towards zero-sum contests”. Thus, it refers to the need for a broad, multidimensional approach to quality in higher education that encompasses issues such as “equity, purpose, inclusion, critical independence and creativity that are necessary for the production of scientific, cultural and public value”.

Along with this desire to expand the viewing angle in research assessment, it is also necessary to include diversity in the mission, in addition to geographical and intellectual diversity (Max-Neef, 2005). Scientists have different research missions; sometimes their goal is to push the boundaries of knowledge, while at other times their focus is on solving specific issues of the day or problems affecting modern-day society. Thus, according to the author, the assessment process should also consider merits relevant to policy, industry or the public. With respect to geographical and social diversity, in many parts of the world, research excellence is equated with English-language publication and the “pluralism and societal relevance tends to be suppressed to create papers of interest to the gatekeepers of high impact: English-language journals. [...] Metrics built on high-quality non-English literature would serve to identify and reward excellence in locally relevant research” (Hicks et al. 2015).

In reference to academic assessments in general, beyond research, the Association of Universities in
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1.5 The digital-human future. Constructing more inclusive and accessible universities
1. Towards a new paradigm

We are facing a paradigm shift in which digital technologies are gaining increasing importance in higher education, reshaping teaching methodologies and even the way we understand university training. As Govindarajan, Srivastava and Enache (2021) stated, the prevalent scenario in university education for centuries “required students to come together at a predetermined time and location to be taught at an instructor-led pace.” Online educational alternatives, such as massive open online courses that take advantage of innovations in communication technologies, have changed this model. Consequently, digitalisation has called into question the space and time of training.

The European University Association (EUA) (2021) has described “universities without walls”, in which “the virtual campus will make the university ubiquitous. It will be developed to improve access for all to participate in research and learning, enhance cooperation, and explore new, innovative ways of pursuing university missions.” According to Govindarajan, Srivastava and Enache (2021), digital technologies “have matured to a point where they can cause disruptive changes to the age-old college education model.”

The Covid-19 health crisis has accelerated this trend. The unexpected shift to online classes, which was not always sufficiently informed and prepared, was a leap of faith and a step forward. Millions of simultaneous experiments took place worldwide: “tecticonic shifts in society and business occur when unexpected events force widespread, coordinated experimentation around a new idea,” explained Govindarajan, Srivastava and Enache (2021). Many difficulties emerged, especially in the early stages of the pandemic, but the lessons learnt and experiences gained have clearly revealed the potential of technology in the classroom. According to the same authors, “college education that’s known more for anxiety and uncertainty has been replaced by an unprecedented jolt, and the resulting experiment showed that not only are there alternative ways of teaching, but that in some ways, those alternatives are even better.”

At the current time, sufficient maturity of digital technologies has coincided with their considerable momentum due to the health crisis. Digital technologies clearly have great potential in higher education. However, they must be put in the right place in this process of educational disruption. They must be considered a support, another piece in a large network that enables us to advance and construct the education that the world of today needs.

In other words, they must be situated in the framework of what are known as digital technologies for learning and educational management: “we refer to equipping ourselves with the technological tools that enable us to support all the processes associated with the activity of an educational context” (Marti et al., 2018). In this framework, in September 2020, the European Commission presented the “Digital Education Action Plan” (2021-2027) with the main objective of fostering the development of a high-performing digital education ecosystem (European Commission, 2020).

Section 2 below presents digital technologies not as an end in themselves but as a means to construct a universal, inclusive, efficient education. Section 3 expands on some of the topics from Section 2 and discusses online, face-to-face and blended models. Section 4 focuses on artificial intelligence and digital humanism, and the relationship that is established between them in educational debates, where it seems clear that the centre of all changes should not be the desire for perfection, immense and the possibilities of technology per se, but humanity’s needs in relation to the planet on which we live. The last section, Section 5, discusses digital citizenship education as a right for all and a priority of education systems worldwide.

2. Digital technologies as a medium

“Online education” and its variants, including “online instructor”, “online teaching”, “distance education” and “distance learning”, are concepts that cover a wide range of phenomena. Their definition depends on their use in each context. They could refer to a traditional distance education using new technologies or to e-learning with a strong technology-based approach, they could involve synchronous and asynchronous solutions, or they could be understood as a simple replica of classroom lectures, usually based on video lectures, as a PDF delivery model or as an accessible repository of documents (Sangrà, 2021). Cohn (2021) refers to this variability and the resulting confusion “the ‘digital’ ‘hybrid’ especially continues to confuse in light of the myriad options that colleges and universities are offering students for the time and location of their classes.”

In this sea of technological possibilities, what should be determined is where we are going and how technologies can help us to get there. Often, the focus of debate is the technology, as if digitalisation were an aim in itself. However, the main issue to discuss is what education model we construct with the available technology to reach students, and what we want to obtain (Freeland, 2021).

There are three aspects at the centre of many of the debates on this issue. The first is how digital technologies can help to reduce the costs of education and reach the maximum number of people. The second is how digital technologies can help to make higher education more flexible to adapt to the different needs of students. The third is how digital technologies can help to construct good learning models for the world of today.

Regarding the first aspect, Govindarajan, Srivastava and Enache (2021) propose three strategies that are clearly differentiated in economic terms. Higher education institutions must choose from among the first: an institutional model based on the idea that universities and students have limited resources. In this proposal, the key is to divide resources optimally between “face-to-face interactions, which impose the highest cost on students and universities, and asynchronous virtual learning, which imposes lower costs. Ideally, universities should conduct only those activities on campus that [...] are hard to do remotely.” The third strategy is “a fully online model that offers quality education to strictly defined audiences.”

This wide range of options means that a larger, more diverse section of the population can be accommodated. However, we should be cautious and attentive, as the potential of digital ecosystems for learning could become a kind of “Trojan horse, bringing new segregation and worsening existing divides. The rise of digital technologies that has occurred in recent years in different sectors, and the strong push that they received during the pandemic now provide us with an excellent opportunity to study in depth questions like these, in the framework of an innovative pedagogical model, to achieve a more universal, inclusive higher education.

Flexibility in higher education is crucial in a world such as that of today, where studies and work are combined, where lifelong learning requires a flexible model (see the chapter The future of work), and in which the profiles and circumstances of students are highly varied. This required flexibility is another area in which technology could play a notable role. Eringfeld (2020) indicated that “by combining virtual with face-to-face education, universities will be able to accommodate the diverse needs of students in safe and flexible ways.” Similarly, Cohn (2021) noted the importance of the current time in this respect: “we have an opportunity to rethink not merely how to leverage online and hybrid learning to deliver content, but, more important, how to use the faculty’s growing expertise with technology to make teaching and learning more accessible for everyone.”

Cohn (2021) used an example to explain how students could be offered different ways to approach contents: “short prerecorded lecture videos allow students to watch at regular speed or slowed down; they can listen or turn on captions to read along, or they can read the transcript of the video and not engage with the audio or visual elements at all.” These options benefit, for example, students with functional diversity or those who work full-time and can only take classes asynchronously. In addition, the author explained that some students learn better when they can go at their own pace. The aim is to take “the diversity of learners into consideration up front as we design our courses.”

Flexibility is very closely linked to another of the characteristics that is sought in the new higher education models: personalisation. In fact, as Martí stated (2021), “the gradual reduction in face-to-face activities due to the blended paradigm does also permit ever increasing personalisation.” In turn, Taylor and Burquel (2021) noted that digital technologies and new educational models must enable us “to adapt to independent learning and develop personalised learning, allowing the students much more flexibility in their learning paths.” However, personalisation in its strictest sense requires the support of artificial intelligence tools and these are still not sufficiently developed to be implemented comprehensively (see Section 4).
A concept that seems more appropriate in these contexts is that of “self-management of learning”. This occurs when, as a result of technologies and the flexibility that they permit, we can decide at what pace to learn and when we do activities.

Regarding new models of learning, which is the third aspect of the debate, more than simply investing in infrastructure and new tools over an education system that is sometimes outdated (Riera, 2020), we must consider how tools can be used “to foster meaningful learning in e-learning environments, designing new pedagogical models and learning strategies” (Taylor and Burquel, 2021). Altbach and de Witt (2020) also confirmed that what is needed is to take advantage of these tools to enhance the quality and sophistication of courses and programmes by integrating the online dimension. However, we should not expect a massive, hurried revolution, as many inaccurately predicted with massive open online courses (MOOCs).

3. Complementarity between online and face-to-face modes in new learning scenarios

In recent years, and particularly since the outbreak of the pandemic, online learning models have been increasingly present in the higher education area. Online education has advantages, but the value of face-to-face activities is notable. It is increasingly clear that face-to-face and online activities will coexist. This coexistence can be focused on meeting the needs of each training process and the learning objectives. Nevertheless, given that face-to-face activities have added costs, a physical-digital segregation could emerge in higher education, in which face-to-face students would benefit from the experience of social interaction on campuses, while digital students would be deprived of this advantage.

According to Govindarajan, Srivastava and Enache (2021), “lectures that require little human interaction must be digitized. Students can watch multimedia presentations using immersive interactive technologies at their own pace. […] For such courses, technology platforms can deliver content to large audiences at low cost, without sacrificing one of the important benefits of the face-to-face classroom – the social experience – because there’s hardly any in these basic-level courses.” In contrast, according to Taylor and Burquel (2021), face-to-face mode is more suitable for active problem-based learning.

UNESCO (2020) has highlighted the importance of schools as a space for socialisation and learning about collective life, where face-to-face activities are vital and irrepeable. However, it also noted the importance of bringing together everything that we have learnt to be able to progress in the future: “though the school space remains fundamental, it needs to be transformed and augmented by a much broader space for learning.” In turn, Innerarity (2021) explained the importance of students’ presence in learning processes, and differentiated this from the mere transmission of information where the space is not as important.

The idea of the irrelevance of places was associated with the information society, but the knowledge society has a more intense relation with space and presence. The conditions of teaching are not the same as those of learning. Information is ubiquitous. However, more educational experiences require, in contrast, a specific place. Information, which is universally accessible, must be distinguished from experiences that require personal interaction” (Innerarity, 2021).

In addition, some authors argue that the channel is not the most important factor. What is really vital is the opportunity to interact, whether face-to-face or online, synchronously or asynchronously. Cohn (2021) gathered data from an Educause study and stated that “students’ most-positive experiences depended more on the number of opportunities for student-instructor interaction than on the type of learning environment itself. How instructors and students organized and spent class time, and the amount of feedback and direct interaction, mattered more than the use of technology.”

Everything seems to indicate that the nature and structure of many universities will be hybrid and designed with a holistic approach to be able to accommodate the various learning needs of society, as described by the EUA (2021).

The physical campus will continue to be crucial as a place for social interaction and dialogue: a place that will host encounters that challenge and inspire, but will also offer quiet spaces for focused learning and research. The virtual campus will make the university ubiquitous. It will be developed to improve access for all to participate in research and learning, enhance cooperation, and explore new, innovative ways of pursuing university missions (EUA, 2021).

4. Artificial intelligence and digital humanism on the discussion table

Artificial intelligence is gaining ground in the higher education area. According to Rouhainen (2019), the support of systems based on artificial intelligence could be of great help to reduce repetitive and routine tasks. This would give teachers more time to attend to students, train and research. Furthermore, “AI-based learning systems would be able to give professors useful information about their students’ learning styles, abilities, and progress, and provide suggestions for how to customize their teaching methods to students’ individual needs.” However, artificial intelligence’s entry into higher education is still very subtle. Consequently, for artificial intelligence to be implemented on a large scale a lot of research is still needed into this type of tools (Rouhainen, 2019).

The implementation of artificial intelligence in higher education institutions is not without controversy. For certain artificial intelligence systems to function well, data are required, big data extracted from students’ activities, and this must be managed in a way that is appropriate and ethical. Prats (2020) highlighted the risk of technology in terms of determinism: “a computer knows you so well, you can personalize education so much that you have the risk that people will take away the liberty of improving.” Finally, some have clearly warned us that technological development could go too far. “Brutal technological development with no control could be like a steamroller that crushes our lives and even our own nature. We should think about this, as some humanists do” (Fanjul, 2017).

The benefits and opportunities of artificial intelligence are clear, as are the risks. In the face of this situation, it seems that the best solution is to find a good meeting point between taking advantage of artificial intelligence, and more generally digitalisation, and strengthening everything that makes us human: “There will never be a time when humans aren’t necessary for the tasks related to education. For example, teachers will always play a crucial role in our society, as we must never underestimate the value of human interaction and critical thinking in the field of education” (Rouhainen, 2019). Taylor and Burquel (2021) stated that “the Fourth Industrial Revolution is bringing fast technology-driven change, integrating technology and people, the physical and the digital, into new approaches, services and products to ‘augment intelligence’.”

Fanjul (2017), using the words of philosopher Marina Garcia, defended the search for this meeting point by establishing “a new partnership between sciences and humanities, a partnership to reconsider what we expect from technological development, what we want to become.” In fact, as indicated by the same author, technological development is strongly associated with certain branches of the humanities, particularly the most philosophical. Similarly, using the words of science and technology philosopher David Casacuberta, he stated that “many technological developments first emerged in the mind of philosophers to then be developed by engineers” (see the chapter Citizens).

In fact, many have suggested that a meeting point should be found between digitalisation and that which makes us human. Many have expressed this idea in another way, from the perspective of the need to put people, human life, at the centre of technological development, always in relation to the planet on which we live. This was explained by Trías de Bes (2020): “digital humanism is a trend that shows that digitalisation is not at the service of technology, but of humans. I sincerely believe that if we are going to accelerate the digitalisation of citizens’ behaviour and habits, the companies and suppliers of technology that do this best will be those that design a digital future with the individual as the starting point.” Plana (2020) explained the difference between understanding digitalisation as a noun – the core, “the necessary subject of all actions”, the final objective – or as an adjective – “the descriptive complement that adds value”, the means. Plana concluded that “a classic subject should be put at the centre: humanism, and everything should pivot around people.”
5. Digital citizenship education: a right and a priority

According to the Council of Europe’s definition (2021), “Digital Citizenship Education is the empowerment of children through education or the acquisition of competences for learning and active participation in digital society.” Considering this definition, education must gain a new dimension that prepares children and subsequently young people and society in general to participate actively and fairly in the digital society, exercise their rights and responsibilities online, and promote and protect democracy and human rights. Taylor and Burquil (2021) also noted the importance of gaining digital competences, in this case, for growth and professional development: “graduates need to have the skills to live and operate in a technology-led world and also understand how to leverage the potential of technology for new business development.”

Digital citizenship education must be a priority of education worldwide. This was stated by the Council of Europe (2021) and explained by UNESCO (2015): “educators need to better prepare new generations of ‘digital natives’ to deal with the ethical and social dimensions of not only existing digital technologies but also those yet to be invented.” It is essential that this training is a process that develops throughout life, is cross-cutting, continuous and efficient (Council of Europe, 2021). Finally, it is vital that training is prepared to get the most out of the digital world’s benefits and to be prepared for the potential hazards that it involves.

Although it is generally accepted that the use of digital technologies is a way to make higher education more inclusive and universal (Section 2), technology can also lead to exclusion: “technology is increasing inequality in skills: ‘with the development of relatively inexpensive technology, the digital gap’ is more likely to be a gap in skills required to make advanced use of the technology than access to technology per se” (Council of Europe, 2021) (see the chapter Impact of Covid-19 in Higher Education). Similarly, Tello Leal (2007) distinguishes between the digital divide and the cognitive divide. The cognitive divide is much more worrying and the real challenge, as it “accumulates the effects of the various divides observed in the main areas of knowledge, access to information, education, scientific research, cultural and linguistic diversity.” It is the main challenge to construct knowledge societies. Although access to information is essential, the most important step is to transfer information into knowledge.

Even if resources are invested to expand the infrastructure for accessing the internet, a wired society in which conditions of connectivity exist is not the same as a society that is prepared to access, assess and apply the information. The aspiration to attain a knowledge society must involve people having real access to information in addition to being able to access the internet. They must know what to do with this information and be able to convert it into knowledge, and the knowledge into tangible beneﬁts” (Tello Leal, 2007).

The Ferrer i Guardia Foundation (2020) also expressed this idea “[social inclusion] is achieved through people’s capacity to get closer to technology and benefit from it in a way that goes beyond the digital sphere and has an impact on opportunities to improve living conditions.”

Clearly, the opportunity to access knowledge does not eliminate the differences in knowledge between individuals and regions. In other words, the cognitive divide will not disappear by solving the problem of the digital divide (Tello Leal, 2007). A broader approach to the problem is required, and education plays an essential role in this.

References


1.6 Sustainability. Reinventing universities for a sustainable future


1. Sustainability: the unavoidable responsibility of education

Climate emergency, extraction and production systems that disregard the planet’s biophysical limits, global health crises and growing social inequalities within and between countries: these concerns are repeated tirelessly and call for a profound, systemic paradigm shift, if we genuinely want to think of a future for humanity on Earth. Indeed, the sense of urgency to bring about such a transformation has only grown stronger during the Covid-19 pandemic, which has made clear and, in most cases, sped up existing disparities and imbalances.

In The Sustainable Development Goals Report 2021, the United Nations (UN) lays out an array of facts and figures that can leave nobody indifferent. In 2020, the global rate of extreme poverty rose for the first time in over twenty years. At the same time, the climate emergency worsened: the concentration of greenhouse gases keeps going up; the average temperature has now climbed to roughly 1.2°C above pre-industrial levels; and the impacts of climate change are increasingly plainly to see. Moreover, as UN Secretary-General António Guterres puts it in his foreword to the 2021 report, “[t]here is a risk of a generational catastrophe regarding schooling, where an additional 101 million children have fallen below the minimum reading proficiency level, potentially wiping out two decades of education gains.

The education that Guterres now sees at risk includes an unavoidable commitment to sustainable development. That is, education must promote “individual behavioural change for sustainable development, equality and respect for human rights as well as fundamental structural and cultural changes at the systemic level of economies and societies, and also [promote] the requisite political action to bring about these changes” (UNESCO, 2021). Ultimately, education must be the guiding and driving force to ensure that economic and social development takes place within the planet’s limits and with respect for human rights.

According to the 2030 Agenda for Sustainable Development, education for all is “its first target” (UN, 2015): “The 2030 Agenda has been put together to furnish a common framework and implementation tools to agents and processes involved.” Section 2.2 below includes a brief chronological overview of multilateral policies relating to the environment and, subsequently, to sustainable development right up until the approval of the 2030 Agenda. It also sets out an analysis of the shortcomings of the 2030 Agenda as a global roadmap. Section 2.3 then applies these premises to higher education, one of the key agents in the transformation toward a future in balance with the environment and with equality for all of the planet’s inhabitants.

2. The role of higher education in the 2030 Agenda

For the first time, the climate emergency had reached the political arena and was now the focus of the world’s attention. A few months beforehand, the Club of Rome had published a report entitled The Limits to Growth, the outcome of a study conducted by 17 researchers into the exponential economic and population growth, taking place on a planet with limited resources.

Over ten years later, in 1983, the UN General Assembly set up the World Commission on Environment and Development (WCED), which became known as the Brundtland Commission after the name of the commission’s chair, former Norwegian prime minister Gro Harlem Brundtland. After four years of work, the commission brought out its report Our Common Future, in which it defined sustainable development as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (World Commission on Environment and Development, 1987). The Brundtland Report, as it was called, took up the spirit of the Stockholm conference, putting the environment back on the political agenda and pinpointing the need to tackle the environment and development jointly.

The efforts of the Brundtland Commission laid the groundwork for the first UN Conference on Environment and Development (UNCED), or Earth Summit, in Rio de Janeiro in 1992. The Rio conference put on the table the interdependence of the social, economic and environmental spheres, and raised the need for a new way to look at how we produce, live and work in order to bring these spheres into balance and make them sustainable. At the time, this was truly revolutionary. The Rio conference also saw the crafting of the first Agenda for Environment and Development, or Agenda 21, which laid out recommendations ranging from new educational methodologies to proposals for the preservation of natural resources, by way of alternative economic models.

In 2000, the third millennium kicked off with the Millennium Summit at UN headquarters in New York City. The summit culminated in the adoption of the Millennium Development Goals (MDGs), which set 2015 as the deadline for their achievement. The MDGs represenced an unprecedented push in the fight against poverty and the pursuit of other development goals, such as the prevention of life-threatening diseases and primary education for all. Indeed, the MDGs have been described as a human development agenda because that was their primary focus.

In 2012, the UN Conference on Sustainable Development (UNCSD), which is also known as Rio+20, was convened as a twenty-year follow-up to the original Earth Summit in Rio. The Rio+20 participants came to an agreement to launch a process to produce a list of Sustainable Development Goals (SDGs) that would carry on the MDGs originally set for 2015. After a process of multilateral negotiations, the UN General Assembly approved a resolution on 25 September 2015. It was entitled Transforming Our World: The 2030 Agenda for Sustainable Development and it established 17 goals and 169 targets. Importantly, the approval of the 2030 Agenda, as it has become known for short, happened only a few months before the signing of another historic accord: the Paris Agreement on Climate Change in the context of COP21.

The 2030 Agenda, the process of its construction and its final outcome, have been the subject of much analysis and debate. Martínez Martínez & Martínez Osés (2016) describe it as “an aggregation of visions and interests [and means of implementation] that was the result of power asymmetries”. For his part, Gómez Gil (2018) focuses on the idealistic, visionary nature of some of the goals, the feasibility issues of the approved indicators, the complex architecture, and the technical limitations and inconsistencies. On the other hand, the philosopher and activist Jorge Riechmann made some remarks in 2017 that echo the effect that the SDGs “would have been useful thirty years ago, but now incremental changes and gradual pathways are of no use. We have let decades of denialism and inaction pass by, so that now the prospects are bleak and somber.”

Several authors criticise the 2030 Agenda for its lack of clear, direct accountability. For instance, Gómez Gil (2018) characterises the SDGs as “empty rhetoric and deliberate ambiguity, which call for sweeping world-wide changes through concerted international action that does not appear to be part of any current political priorities”. In the same vein, Martínez Martínez & Martínez Osés (2016) emphasise “the agreements’ lack of any binding and prescriptive character [. . .] made it possible to take up certain demands of transnational groups without giving rise to direct responsibilities for any given actor”. For instance, the 2030 Agenda calls for a global partnership, but it distinguishes neither
who is responsible nor what real possibilities may exist to bring about change. As the two authors note, “the final approved text does not constitute an ‘intergovernmental consensus’ in the strict sense, but is simply a wide assortment of issues, insights and proposals that coexist in a declaration whose character is more descriptive than prescriptive in the way of solutions”.

The new global roadmap for sustainability that is defined by the 2030 Agenda does go beyond the UN development agenda in effect until 2015. According to Martínez Martínez & Martínez Osés (2016), “the goals are expanded, new steps are taken in the direction of a universal, multidimensional logic of development, and relevant elements are introduced for the governance of development”. As to the aim of universality, Gómez Gil (2018) points out that “the MDGs applied only to impoverished countries, taking a limited view of development, far from a multidimensional understanding of development. [By contrast, the SDGs] are a mirror through which all nations see their own policies and performance reflected back at them.”

Despite these advances, however, Gómez Gil (2018) stresses that there has not been a smooth transition from the MDGs to the SDGs and old problems of compliance have not gone away. Specifically, the SDGs are the heirs of commitments and agreements embedded in the MDGs “but without having gone through a thorough, comprehensive evaluation of the political and technical fulfilment of the earlier agreements” with the result that there is a lack of “exact scientific evidence to support the views of the responsibility and priorities” appropriately.

Closely connected to this issue with the SDGs, Gómez Gil adds that “many of the goals and substantive targets defined by the 2030 Agenda does go beyond the UN universal, multidimensional logic of development, and the unfinished nature of the 2030 Agenda: “the idea of embracing a new paradigm, which challenges even the most fundamental definition and goals of the educational process.

However, this is not news. For some time, efforts have proceeded apace. In the context of the MDGs, for instance, the UN Decade of Education for Sustainable Development (DESD; 2005-2014)4 set a goal to integrate the principles, values and practices of sustainable development in all aspects of education in order to enow education with the knowledge, competences and attitudes needed to become a change agent.

Subsequently, on 21 May 2015, the World Education Forum met in Incheon (WF 2015) and adopted the Incheon Declaration for Education 2030, which set out a new vision of education for the next 15 years under the framework of the 2030 Agenda: “our vision is to transform lives through education, recognising the important role of education as a main driver of development and in achieving the other proposed SDGs” (UNESCO, 2015b).

More specifically, Education for Sustainable Development (ESD)5 is an integral part of the 2030 Agenda, particularly of SDG 4.76

However, it is also a key element in the achievement of all the other goals. In this context, the ESD for 2030 roadmap (UNESCO, 2020), the framework for the current decade of Education for Sustainable Development, envisions the urgent sustainability challenges and points out “the implementation of the new Education for Sustainable Development: Towards Achieving the SDGs” (ESD for 2030) framework, which was adopted with the aim of increasing the contribution of education to building a more just and sustainable world”. Indeed, the roadmap outlines activities in five priority action areas: advancing policy, transforming learning environments, building capacities of educators, empowering youth and accelerating local level actions. Moreover, the roadmap has underscored ESD’s key role in the successful achievement of the 17 SDGs and the major individual and societal transformation required to address the urgent challenges of sustainability.

The ESD for 2030 framework was presented to the UNESCO World Conference on Education for Sustainable Development 2021 in Berlin, where the Berlin Declaration on Education for Sustainable Development (UNESCO, 2021) was adopted. “In this Declaration we authorize ESD’s role in the successful achievement of the 17 SDGs and the major individual and societal transformation required to address the urgent challenges of sustainability”.

Higher education has a great responsibility under the new paradigm. Not only does it open doors into the world of work, but for many citizens it also prepares them for life in the twenty-first century. That is, “these citizens will necessarily come face to face with a changing reality in which the change is, in reality, imperative and in their hands. As former UNESCO Director-General Federico Mayor Zaragoza said to GUNi (2019): “universities must be at the forefront of the radical and urgent changes that are needed to put the SDGs and the Paris Agreement on Climate Change into practice”.

Within the educational process, therefore, we observe that higher education holds a key position in time, if we understand it as a part of stage that will extend throughout life; and it also holds a key position in space, by virtue of being situated between the local community and the international context. GUNI (2017), in its entitled report Towards a Socially Responsible University: Balancing the Global with the Local, addresses these very issues: “HEIs can be identified as key players from both perspectives and, thus, have the singular responsibility of helping to provide appropriate and adequate responses to both legitimate needs and interests” in the global arena and in the development and competitive ness of their societies.

Higher education also has great potential in the change process because of its link to knowledge. Its unique role in the production and transmission of knowledge gives it a tremendous capacity for growth. This unique quality, together with its key position between local and global and the fact that is the doorway to employment for many, turns higher education into the guiding and driving force for all other change agents as well.

Part 1: New Contexts, New Visions

New Visions for Higher Education towards 2030

5. By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture’s contribution to sustainable development.”

6. Wrap-up video with some conference highlights: https://www.youtube.com/watch?v=DpByUG2n

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On the one hand, the SDGs are transforming the way higher education institutions function. This includes for example teaching about them, specifically doing research or in general orienting the institution along the 2030 Agenda. [...] On the other hand, HEIs are actively contributing to the achievement of the global goals, again through teaching, research, community engagement and campus initiatives. What is more, the sector critically engages with the goals set in the 2030 Agenda, questions them, revises them and in many cases translates them to the local level. Many academics and scientists are in dialogue with national governments, UN agencies and other policymakers, thus actively engaging themselves in the science-policy interface (IAU, 2020).

One noteworthy initiative was the publication in 2017 of a guide entitled Getting started with the SDGs in universities: A guide for universities, higher education institutions, and the academic sector, which was put together by a group of universities in Australia and the Pacific that were members of the Sustainable Development Solutions Network (SDSN). As the guide’s authors note, “arguably none of the SDGs will be achieved without this sector” (SDSN Australian Pacific, 2017). On the assumption that every higher education institution will approach the SDGs differently, the guide offers tools that can be adapted to different contexts. In 2021, the SDSN in Spain published an updated version of the guide entitled Accelerating Education for the SDGs in Universities: A guide for universities, colleges, and tertiary and higher education institutions, “[which] aims to expand, update and refine the information provided in the previous guide based on new resources, tools, thinking, and learnings from universities working to implement ESDGs, to consider what ESDGs mean for universities” (SDSN, 2020). In the same vein, GUNi has adopted a strategic line of action to fit the SDGs, but rather to engage with them”. For his part, Ferrer-Balas goes on to say that “it would be quite naive to see it as a two-step change: first, the universi-

3. Foundations for change

As Tilbury (2011) says, “sustainability is more a journey than a checklist”. The implementation of sustainabil-

ity in higher education necessarily entails profound changes that take time and a determined transforma-
tion that reaches every part of HEIs. In this respect, several authors make proposals that revolve around (i) the idea of connection or synergy, that is, connecting with the environment and with people near and far, connecting areas of knowledge with one another, and connecting higher education institutions both inwardly and outwardly, while a host of writers mention (ii) the need to change how we approach sustainability, that is, by using critical thinking, engaging not only with fear but also with hope, and employing self-restraint while, at the same time, taking action.

(i) Synergies, broadly understood, are essential to create the necessary conditions for a higher education in support of sustainability. Wals (2020), for instance, speaks of the need for a “relational pedagogy” that would create opportunities for connection, more specifi-
cally, to “connect to the local environment and the way it relates to the wider world, connect to other species and non-living matter in a deeper and more caring way, and connect to other humans, also those not in sight, those thinking differently, having different socio-economic, cultural, etc. backgrounds”. Ferrer-Balas (2011) similarly underscores the importance of fostering contact between different cultural milieus, especially those that are more compatible with the principles of sustainability, such as Buddhist culture.

In addition, synergies need to be generated between branches of knowledge, and between sustainability itself and other disciplines. This is not yet always the case. For instance, GUNi (2019b) highlights a “lack of coordination and interdisciplinary work” and, there-
fore, “the need to break down silos and work across disciplines and faculties”. Similarly, Grancitelli et al. (2020) note that “even now that we have crossed pla-
netary boundaries and life on the planet is rapidly going extinct, the university still treats sustainability as a sepa-
rate discipline or as an ‘add-on’ to the standard package meant to sustain our competitiveness by advancing green technologies”. There is also a great need not only for interaction among the different members, departments and areas of higher education, but also for interaction between the foregoing groups and outside agents. As GUNi (2019b) has put it, “most of the higher education com-

munity involved in such topics agree that the main objective for HEIs in the implementation of sustainable development should be its holistic integration in their systems”. More specifically, “in many cases, [...]. there is a leadership that is convinced of the need to embed sustainable development but finds it very diffi-
ticult to reach academics, service staff and students and make cultural change possible, or we find strong bot-
tom-up approaches coming from enthusiasts that lack clear support from leadership”. Also, the interaction between HEIs and society is imperative and it is even more crucial to foster a systematic vision that inclu-
des every agent involved in the change process. In this respect, Ferrer-Balas (2011) speaks of “thoughtful tran-
sition”. Clearly, the university must change; however, Ferrer-Balas goes on to say that “it would be quite na"
ive to see it as a two-step change: first, the universi-
ty, change, and sensitivity towards the other, the far away and the un-
known”. Clearly, it is necessary to keep pressing forward and lay the groundwork for change in HEIs so that it is both robust and binding.

(ii) As noted above, another frequently mentioned issue is the need to change how we approach sustainability. Recall the famous words of Einstein: “we cannot solve problems by using the same mindset and behaviour toward the world: “scaling-down and pulling-back rather than designing our way out of the uncertainties we face in the face of an uncertain future. Grancitelli et al. (2020) put it this way:

Our inspiration came from Martin Luther King: he had proclaimed: ‘I have a nightmare’, he would never have mobilised the critical mass to uproot entrenched racism. Young people today cannot imagine a world without, say, fossil fuels, even if they know CO2 emissions are killing us. They fear the loss of familiar lifestyles for lack of a ‘dream’ about a better future. So dealing with these fears and hopes is a crucial ingredient of education for a sustainable future (Grancitelli et al., 2020). In addition, we need to change our deeply entrenched mindset and behaviour towards the world: ‘scaling-down and pulling-back rather than designing our way out of
problems” (Grancielli et al., 2020). In the case of the climate crisis, it has become clear that human beings cannot solve the problems basically through technology, taxes and legislation. According to the authors, what is necessary is “self-restraint in human behaviour”. Perhaps the most commonly repeated point is that we must get beyond knowledge and commitment, that is, we must take action. It is necessary to live sustainability as an experience, not merely in academic terms (Castells, 2021). But what has to be done so that today’s young people become citizens committed to sustainability? According to Grancielli et al. (2020), “if you look at our university education, the answer seems to be that you have to learn ‘facts and figures’ about issues like climate change or pollution, and once you know what is wrong, you will do the right thing. Of course, that’s not how it works.” Young people are well informed about the climate crisis and, indeed, many of them take to the streets to demand action (see Section 4.1). However, the authors add that “asking the government to save the planet is one thing. Changing your outlook on life is another. And that is not what you learn in the groves of academe.”

Failure to take action can have serious consequences. As Wals (2020) warns, “when there is a disconnect between what a school does and what it tries to teach in these areas, there is a hidden curriculum of unsustainability at work that can do more harm than good”. When education focuses only on knowledge and commitment there is a hidden curriculum of unsustainability in social and economic perspectives. The following sections lay out the implications of all three perspectives for higher education. Specifically, Section 4.1 links the higher education of the climate change, while Section 4.2 adopts a social perspective to treat higher education as a common good and Section 4.3 looks at education for economic well-being.

4.1 Adaptation and transformation: higher education and climate change

UNESCO (2015) has stated that “education plays a paramount role in raising awareness and promoting behavioural change for both climate change mitigation and adaptation”. This is indeed what is set out in SDG 13.3.7. The role of higher education in sustainable development is key, not only with regard to the transmission of knowledge on the subject and the raising of awareness and commitment, but also in the case of action. In other words, higher education must work with other change agents to mitigate the effects of climate change and create the means by which we can adapt to new environmental conditions.

According to Facer (2020), higher education institutions have the chance to become core actors in the transition toward sustainable models. As she puts it, “climate change is not a scientific and technical matter alone, but is driven by a set of underpinning issues relating to economics, social inequalities, how we produce knowledge and ideas of what it means to be human”. Thus, higher education can make major contributions not only through research into the scientific and technical aspects of climate change, but also by dealing with all of the underlying issues transversally within the institution. Facer (2020) clusters these underlying issues into four specific areas for action: 1) redesigning the day-to-day practices and colleges to reduce emissions, nurture biodiversity and adapt to the impacts of a changing climate; 2) reinvigorating the civic role of institutions to build ecologically and socially resilient communities; 3) reshaping the knowledge structures within the university to address the interdisciplinary complexity of climate change; and 4) reforming the educational mission of the institution to support students to develop the emotional, intellectual and practical capacities to live well with each other and with the planet in the era of climate change.

Against this backdrop, various initiatives now enable universities to propose and pursue innovative projects to address the challenges of the 2030 Agenda at the scale that pertains to them (Miñano, Benayas & Mataix, 2021). The overall aim is to transform HEIs into living laboratories and then implement any changes more broadly afterwards. In the same vein, Arjen Wals gave a lecture for the Baltic University Programme in December 2020 in which he laid out the role of universities in co-creating transitions toward sustainability: first, it is possible to create small niches of action, which can be student actions or courses on sustainability; second, it is necessary to develop whole programmes or projects; third, the local environment becomes a resource for education. The incorporation of the local environment in the transformation of the university can be understood as a first step toward the transfer of HEI changes to society.

In the same context, we must not forget the current role of young people in addressing the planet’s challenges. Drawing on the words of Dani Fischer, a sociologist at the University of Maryland who studies activism, Marris (2019) explains that “young people have been talking about climate change for decades. But the latest gene- ralization of protestors is louder and more coordinated than its predecessors. [...] The movement’s visibility on social media and in the press has created a feedback loop. Young people are getting so much attention that it draws more young people into the movement.” Indeed, the environmental awareness of young people entering higher education is much greater than it used to be, and this is an aspect that HEIs must take on board in order to move forward decisively.

4.2 Higher education as a common good

The knowledge society has led to a growing acceptance that university training is necessary to obtain high-quality, value-added jobs, and this realisation is indeed reflected in a sustained increase in higher education. Indeed, it has prompted a rise in higher education enrolments. However, the universal agreement exists on higher education. In this vein, SDG 4 sets out for the first time that “the scope of education is conceived of not merely as universal, but also as transversal, as something that is pursued throughout people’s lives. For this reason, the scope must now include the achievement of inclusive, equitable access to a higher education that must be one of quality” (Martínez-Samper & Vilalta, 2021). Along the same lines, a recent report entitled Reimagining our futures together (UNESCO, 2021b) seeks to build a new social contract to reinforce this idea and expand the right to education so as to include access to information and the right to opportunities to make contributions to the knowledge commons, the accumulated and ever-changing resources of our collective knowledge.

SDG 4 also focuses on the presence of women and other groups that have traditionally been more excluded from education. The aim is to “eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations”. Likewise,
Since the late nineteen-seventies, gender issues have gone through changes in higher education. While there used to be a notable underrepresentation of women, now the level of schooling for women has risen and they have a greater likelihood of completing their studies than men do (UNESCO-IESALC, 2021). This phenomenon has come to be called the “female advantage”. The 2021 UNESCO-IESALC report asks whether the “female advantage” has really put an end to gender inequalities, since the issue of women’s role in higher education does not appear to have been entirely resolved.

Regardless of these somewhat encouraging statistics on women participation in higher education, concerns about the issue of gender equality in the tertiary education system have been growing over the last decade. A valid assumption is that women, after they graduate, are also able to proceed and study for higher degrees that would enable them to occupy most academic positions in universities, be involved in relevant research, take on leadership roles, and even earn competitive and comparable wages. Yet, [...] this has not been the case (UNESCO-IESALC, 2021).

According to the report, there is a clear increase in women's access to higher education, but they continue to face obstacles when they seek, for example, to take part in important research, move forward in their academic and scientific careers, or take up leadership roles (see chapter The future of work). Another recurring debate linked to education as a common good focuses on the issue of who funds higher education, and whether this funding comes from taxpayers, the Intellectual Property Rights regime, which dominates knowledge production. Yet UNESCO has come to the conclusion that knowledge is the common heritage of humanity and, as such, must be regarded, like education, as a global common good. In this vein, the new social contract for education calls for the inclusion of “a society-wide commitment to include everyone in public discussions about education. This emphasis on participation is what strengthens education as a common good” (UNESCO, 2021b).

There appears to be a clear need to treat both education and knowledge as common goods. Nonetheless, there is an all-too-familiar gap between regulations and discourse on one hand and implementation on the other hand, and gender issues are one of the key elements of discrimination. The dominance of stakeholder groups remains too great (UNESCO, 2015). Beyond calls to enact these rights, therefore, it comes down to everyone working together.

4.3 Education for economic progress and well-being

Jorge Riechmann (2020) notes that “climate change is the symptom, but the disease is capitalism”. The economic model that guides the world today, many argue, is what needs most urgently to be overhauled. In such a context, what role does higher education have to play? Riechmann (Territoris.cat, 2020) makes the critique that “facades of economics everywhere are [privileged] the business school model over economic models committed to the survival of living species, including human beings”.

Denying the gravity of the situation and trusting that it will get fixed without challenging capitalism, in Riechmann’s view, is not working. Moreover, he adds, green capitalism and the green new deal are oxymorons (Territoris.cat, 2020) as we live in a planet of limited resources economically controlled by the self-determining dynamic of capital accumulation, also inherent in its “green” versions. Therefore, Riechmann (2020) defends the need of “an emergency contraction”.

Despite our awareness that the goal is very tough to achieve, Riechmann proposes that we keep doing things in the meantime: “Think about how to organise collectively, not individually, in your daily lives and things closer to home in order to feed yourselves, move about, live in the most sustainable way possible. At the same time, also think about how to fight politically in response to major challenges like mobility, the energy model, a global agroecological program”. In this process, higher education will have an essential role to play. There is a need to support students and the broader society in the transition toward new models and approaches so that, drawing again on Riechmann, “when the signs of major disaster become apparent to the vast majority of the population, we will have enough room to make the best possible responses” (Riechmann, 2020).

Facer (2021), for her part, puts forward a number of proposals for education aimed at economic well-being, revolving around the idea of employability (see chapter The future of work):

For many around the world, having a job in the formal economy has long been seen as a fantasy; their financial income comes primarily from informal work, the grey economy and precarious employment. For many others, the Covid-19 pandemic as well as the 2008 financial crisis made starkly visible the fact that jobs in themselves are not enough to provide economic security. Under these conditions the other ways in which people can provide security for themselves – the care and material resources of the household, the resources of the commons and the underpinning infrastructures of the State – become clearly apparent, alongside their fragilities (Facer, 2021).

Against this backdrop, Facer notes that “education needs and attend not only to students’ capacities to participate in meaningful work in the formal economy, but also to their capacities to create ecologically resilient and caring households, [...] to sustain and defend viable states and to contribute to the maintenance of common goods”. Thus, it is necessary to focus on the whole person and his or her context.

More specifically, Facer (2021) picks up on proposals from the economist Kate Raworth to explain that “economic well-being depends upon [...] provisioning practices” (“I paid work in the marketplace in exchange for money, but also access to goods and services provided by (2) households, by (3) the commons and by (4) the state. With respect to the second aspect, which entails “creating conditions in which households can provide or access care and develop food supplies that are resilient to market and climate shocks”. Facer (2021) stresses that under no circumstances can it involve “removing women and girls from their rights to participate in and contribute to the wider community”.

To sum up, in keeping with education for economic well-being put forward by Facer (2021) and proposals from Riechmann to change the economic model, it is necessary to furnish students with opportunities to rethink how the economy currently operates in order to come up with a model that will actually be sustainable.
1.7 Internationalization. Reinforcing partnerships to attain common goals

As mentioned in the introduction to this report, higher education institutions (HEIs) face important societal demands. The Covid-19 pandemic has increased the pressure exerted on them, and the last two years have resulted in an authentic tour de force for students, academics and staff. Among other issues, the impracticality of face-to-face education and limitations in international mobility posed tough challenges that required new ways of thinking and acting to be successfully overcome. Some of these challenges have had a particular effect on the internationalisation strategies pursued by HEIs, which in recent years have acquired more relevance in university structures.

This chapter attempts to provide a brief analysis of current trends in HEIs’ internationalisation, identifying common issues and proposing some potential lines of action. It aims to identify the potential role of internationalisation policies in the post-pandemic scenario facing universities, and in particular the power of HEI networks, alliances and other collaborative settings to tackle urgent global issues.

1. World context, global trends and their impact on HEIs

If there were still some doubts about the reality and scope of globalisation, the Covid-19 pandemic has shown how interconnected the world really is. Recent events inescapably created an opportunity to confirm not only the existence of very tangible global problems, but also the fact that global problems can only be solved through global solutions. The climate emergency, the consequences of the pandemic, and the socio-economic transformations which, among other consequences, have resulted in an unacceptable increase in massive inequalities, requires a coordinated, decisive and global intervention.

Higher education institutions cannot overlook the crucial challenges that the world currently faces, as these changes jeopardise not only the perspectives and wellbeing of future generations but those of current generations too. To better serve their communities, HEIs need to address global issues. But in addressing global problems it is crucial not to overlook the particularities and conditioning features of their own community. It is important to remember this double linkage of HEIs; they are fully embedded in their local communities and at the same time integrated in a broader global scenario, both local and global trends affect and amplify not only their performance and results but also their main mission (GUNI, 2017).

There are multiple areas of action in which HEIs can make a unique contribution to the solution of global problems. Authors like Slaughter (2017) specifically include universities in the group of players that are "(...) making a real impact in discovering, formulating and implementing solutions to global problems". Along with governments, "[l]arge foundations, universities and civic organisations of all kinds are on the ground trying to tackle what used to be known as "development issues" or international problems such as climate change and global health" (Slaughter, 2017, p. 20).

These lines of action require HEIs to be orientated towards collaboration and association with other agents, and HEIs’ internationalisation policies and practices can play a crucial role in making this possible. Probably the most salient issue is the urgent necessity to rethink and reframe the current world-competition paradigm and to analyse the feasibility of collaborative models at national and international level. This would represent a complete change in the way HEIs’ internationalisation policies are usually understood. Let us consider, for example, the current influence of global technology corporations, which in some cases threaten basic rights like active citizenship, the right to privacy and the concomitant undermining of democracy (See Veliz, 2020; Lanier, 2013). Most higher education institutions are nodes of multi-level networks that create and disseminate high-quality knowledge. They are organised into alliances and other collaborative settings to tackle urgent global issues.

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1. The evolution of HEIs’ internationalisation strategies to navigate an interconnected world

When addressing HEIs’ internationalisation strategies, it is important to keep in mind that, besides the relevance of a university’s autonomy, these strategies are fully imbued in a wider geopolitical scenario and a particular cultural community that universities cannot ignore. As is well known, since their origins universities have conceived of themselves as part of an interconnected, albeit geographically and culturally limited, world. As Guri-Rosenthal (2015) stated, Western medieval universities had been built on the foundations of a common language – Latin – and a vocation of explaining universal masterpieces. The main drivers of academic mobility, understood as scholars and students attending different universities, as well as the international recognition of university credentials, can be traced back to the 14th century1.

This original universal-oriented ethos was diluted by the rise of contemporary nations and their national academies. As mentioned by de Wit et al (2015), in the 17th and 18th centuries became an instrument to support national interests. At the same time, Latin was replaced by national languages as the teaching language, and universities turned into national-centred institutions. This process intensified throughout the 19th century and the early part of the 20th, when preparing national elites for governmental and liberal professions became a central goal for universities. In this context, HEIs aligned their goals and mission with national aspirations, and the concept of serving the country was added to their core values. A second concept arose at that time: the ideal of competition. Originally linked to the recognition of university credentials, can be traced back to the 14th century, this influence can be observed in the development of the European model of university internationalisation.

Guri-Rosenthal (2015) highlights three main moments in that process: the establishment of the Erasmus Programme in 1987, the enactment of the European Higher Education Area, popularly known as the Bologna Process, in 1999, and the adoption of the Lisbon Strategy/Europe 2020, in 2000. All three follow a model of promotion of students’ and scholars’ mobility among European HEIs. For decades, the level of internationalisation of a university has been measured by its national composition (percentage of students and scholars from other countries against the total number of national students and scholars) and bilateral agreements to promote mobility and exchanges between universities have been the preferred mechanism used to pursue it.

A qualitatively different approach can be detected in the fourth and fifth moments: the promotion of internationalisation at home and grounded internationalisation and internationalisation of the curriculum. To define comprehensive internationalisation, they proposed using Hudzik’s (2011) definition: “(...) a commitment, confirmed through action, to infuse international and comparative perspectives throughout the teaching, research and service missions of higher education” (p. 60). Hudzik added that the concept of comprehensive internationalisation “(...) shapes institutional ethics and values and touches the entire higher education enterprise” (p. 60). Comprehensive internationalisation not only impacts all of campus life but the institution’s external frames of reference, partnerships and relations (2015, p. 60).

Regarding internationalisation of the curriculum, Beelen and Jones (2015) suggested using Leaks’ (2015) definition: “[i]nternationalisation of the curriculum is the incorporation of international, intercultural and/or global dimensions into the content of the curriculum as well as the learning outcomes, assessment tasks, teaching methods and support services of a programme of study.” (p. 61)

All three concepts acknowledge the pertinence of multicultural dimensions and global focus in the making of relevant HEI policies. However, in this field, effectively going global in practice is a complex endeavour that implies a certain level of institutional transformation at internal and external level. How HEIs respond to these challenges depends on their characteristics, institutional culture, model of governance, geopolitical location, and national and regional backgrounds.

The fifth moment came with the launch of the European Universities Initiative in 2019, which promoted large transnational, long-term European university alliances (see European Commission, 2019a). The European Commission emphasised that the permanent alliance of European HEIs as a key factor in the construction and strengthening of a European knowledge society (see European Commission, 2019b). This initiative, at least partially, breaks up the logic of HEIs’ individual competition for resources and students, and instead promotes a collaboration framework. It is also important to mention that, albeit with limitations, their proposal includes some forms of collaboration with non-European HEIs. But the main interpretation of what a global knowledge society is, at least according to the official documents released to support the project (see Council of the European Union, 2021), seems to be narrow. Beyond the call to address global problems and include global players in the discussion, the official European conception of a knowledge society is not truly global but regional and it is tackling the obstacles that prevent the construction of a global academy, which would be a very powerful catalyst in the creation of a global knowledge society. Instead, it promotes a model of competition between networks of European universities. In the field of higher education, we generate a natural process of distillation and institutional enhancement to place European academia in a better position in the global academic scenario.

As mentioned at the beginning of this section, understanding university internationalisation strategies means opening up the scope and paying attention to a broader geopolitical context. It is interesting to note that, on occasions, HEIs based in developed countries tend to follow a two-tiered model for agreements on exchanges, collaborations and alliances, according to the country, region or perceived prestige of the counterpart. In that sense, the terms of agreements with peer institutions located in developing countries sometimes mimic those of cooperation for development, in which one party has the resources and sets the terms and the other party accepts it, under certain conditions that they are not allowed to change. As in other areas of globalisation, these trade-offs create new resources matter, and the wide gap in HEIs’ finances makes it extremely difficult to level the playing field for...
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2. From internationalisation as competition to internationalisation as global collaboration

The current trends in HEIs’ internationalisation strategies usually imply a combination of policies and practices from all the above mentioned. Elements of academic diplomacy, language learning and exposure to different cultures through the exchange of students and staff coexist with initiatives to make curricula internationally oriented and globally oriented, as well as promoting collaboration and alliances with other HEIs. The weight and address of each of the initiatives in the international strategy will vary according to factors such as the institutional culture, the institution’s degree of autonomy, its financial capacity, its relationship with the local community, etc. These tools can enable the implementation of new internationalisation models to help universities fulfil their social function, moving from the international competition paradigm to a global collaborative paradigm. The task is not easy, even when among universities from all around the world there is strong consensus on its relevance and urgency. As stated by GUNI (2021):

“(i) In recent years, we have witnessed an unprecedented need and willingness to connect and cooperate. However, we have also seen narrow-minded conceptions, based on nationalism and “we first” policies. We believe the context requires us to think about and develop new visions for higher education and its institutions, missions and values with regard to the public good and social responsibility.” (p. 6)

The chapters in this report show the ways in which HEIs immersed in an entangled setting. The idea of collaborative networks can be very helpful on this point, in particular when paired with other initiatives, like the active promotion of institutional diversity, the internationalisation of the curriculum, collaborative actions with local players, and a commitment to more sustainable and equal access to international exchanges. Integrating into networks allows HEIs to improve their performance and amplify their impact without compromising on their autonomy or identity. Although there are strong and well-established obstacles that could prevent this change of orientation, there are also enablers that could pave the way for it.

A well-functioning network is one in which different players have different roles and collaborate with each other for a common purpose under a win-win logic. Some players may win more than others. But those who win more are precisely those who are more and better connected. However, we take more advantage of a cooperative scheme, and not those who decide to free-ride or compete unilaterally. Networks, of course, can and do compete among each other. But those that are internally more closely connected and cooperative will be externally more competitive (see Ilenkike, 2006 and Slaughter, 2017). Additionally, successful networks are those that are able to collaborate with some external players other than HEIs, such as governments, corporations and civil society organisations. Benkler (2006) identified three dimensions in which a network positively impacts on its participants:

1. It improves their capacity to do more for and by themselves, (2) it enhances their capacity to do more in loose commonality with others, without being constrained by having to organise their relationship through a price system or in traditional hierarchical models of social and economic organisation, and (3) it improves the capacity of individuals to do more in formal organisations that operate outside the market sphere (p. 8).

Among the obstacles: some of the actions that could contribute to change are beyond HEIs’ capacities, others could be held back by faculty due to being perceived as a threat to institutional core values, like autonomy, and, as usual, there is a widespread lack of resources that undermines change and demoralises academic and non-academic staff. The list of enablers includes: the view, shared by HEIs located in different regions and countries, that collaboration, diversity and community engagement are key assets to the present and future of organisations, the successful experience of exchange, and other policies and practices for internationalisation, showing the benefits of opening up institutional boundaries; and the support of already existing networks and associations, like GUNI itself, that promote the creation of institutional learning communities. The idea of HEI networks and alliances builds on the most important and radical value in human societies: the value of cooperation or collaboration. Networks of universities can and must therefore create collaborati-ve schemes of interaction and interdependence among them that are necessary not only to strengthen the individual members of the network but also the global common good, articulating the enormous potential of universities’ global collective intelligence at the service of this global common good.

To contribute to an action-oriented collective discussion, we would like to propose some indicators the HEI could help us to picture the complexity faced by any HEI when undertaking the endeavour of collaborating and coordinating policies and practices with other institutions at local or international level. We have identified six indicators that could help in mapping the strategic position of a university when assessing a collaborative scenario. We believe that one of the factors that might contribute to facilitating integration in collaborative endeavours is to understand the traits that partly shape HEIs’ institutional identity. Please note that these indicators are conceived as a self-assessment tool that could help universities to visualize their position in relation to potential integration in coordinated actions with other players. None of the indicators is good or bad per se, they just represent the situation and could help to identify obstacles and enablers, as well as determining areas in which the university has room for manoeuvre and areas in which the decision is beyond its scope. It could also be helpful to identify partners, based on similar or complementary characteristics.

Even when the indicators are not dichotomous or continuous, it is easier to understand them if they are presented in pairs. The pairs are competitiveness/collaboration, divergence/integration and singularity/homogeneity.

The first pair, competitiveness/collaboration, attempts to capture the institutional dispositional and entailment framework of an HEI towards zero-sum (competitive) and collaborative (win-win) approaches. Variables like participation and position achieved in international rankings, competition for external grants and other resources, as well as the preference for meritocratic and individual results-oriented procedures in the award of scholarships and rewards to students and academic staff are examples of how relevant and integrated into the institutional culture competitiveness is. However, participation in open-science projects, sharing of facilities and resources with other institutions, promotion
of collective problem-solving procedures, participation in collaborative projects with the community, NGOs and other non-academic players, and participation in networks or alliances work as a proxy for the prominence of collaborative approaches.

The second pair, divergence/integration, focuses on how idiosyncratic or homogenised academic procedures and regulations are. To build the divergence indicator, it might be useful to pay attention to variables like the difficulty or ease of recognising credits attained in other institutions (national or international), the length of offered degrees, and grading systems. Integration could be measured by considering policies regarding the exchange of students, faculty and staff, bilateral or multilateral agreements with other HEIs, as well as joint or double degrees.

The third pair, singularity/homogeneity, concentrates on the characteristics of the academic offering, paying attention to its unique or common traits. Looking at the characteristics of the academic offering, paying attention to its unique or common traits. The proposed indicators are not dichotomous or continuous. Every university necessarily has all six components, at different levels and in different configurations, and they may be expressed in different institutional areas. Any accurate and action-oriented analysis of their strategic situation and the potential room for change must take many variables and particularities into account. It is imperative to avoid the one-size-fits-all approach that characterises some styles of policy recommendations, because these changes are not peripheral; on the contrary, they will probably affect universities’ central components and structures.

**Final remarks**

HEIs are asked to open their institutional boundaries and establish effective channels of collaboration with other organisations. This requirement poses new challenges in terms of university performance, finances and governance. As Carvalho (2021) mentioned, these are not new requirements, but in the last decade have been crystallised and consolidated as part of universities’ core functions. She warned against dichotomistic interpretations of the policies and practices established by HEIs in that context, as they are usually too pessimistic or too optimistic, and proposed bringing back into the discussion the relevance of institutional, social and political particularities. This recommendation is particularly appropriate for analysing internationalisation policies and practices.

HEIs’ internationalisation is an ongoing innovative endeavour that is expressed in different ways. It has the potential to make a crucial contribution to institutional transformation and to create a more inclusive and sustainable world, reinforcing the ideal of global citizenship. Internationalisation can also redesign the boundaries of academic communities, making them more open and inclusive, and reinforcing their commitment to the pursuit of knowledge and the common good. However, its actions must be aligned and supported by the whole institution. HEIs’ internationalisation policies and practices may act as catalysts of internal change but cannot act separately from the rest of the institution to which they belong. They can function as a laboratory for innovative practices, but if they really want to promote change, their actions should not contradict the core values of the institutional culture.

The guiding principles of this chapter are extremely respectful of the unique cultural and social character of HEIs. As Page (2007) stated, in a knowledge society diversity is a value per se. Respecting and promoting HEIs’ institutional identity and particularities is a necessary prerequisite of any collaborative intervention. In that sense, the challenge for higher education institutions committed to significant change is to find a balance between competitiveness and collaboration, between divergence and integration, and between singularity and homogeneity, in order to better serve their institutional values and mission. Even when there is no single or simple solution, it could be helpful to think of strategies that combine institutional flexibility, openness and a commitment to transparency, and the courage to innovate.

**References**


1.8 Governance and professionals. Building resilient, innovative and socially committed institutions
1. Introduction

As the contributions in this report show, Higher Education Institutions all around the globe are at a critical turning point. Among other factors, extraordinary internal and external demands, structural financial troubles, large demographic changes, global challenges and emergencies bring global and HEI governance into the centre of the picture.

In the field of public and private management, recent and not so recent literature has tried to answer the question of how to adapt classic principles and guidelines of governance and management to exceptional situations, times of crises and emergencies (i.e., Comfort 2007, Crandall et al. 2013). In this sense, HEIs face certain specific challenges and possess some features that make them special. Aas Shattock (2014) states: “(...) in the modern world, university governance structures are in a constant transition and adaptation process to respond to external pressures in a way we have not seen before”. Institutional autonomy, financial independence, sufficient and stable funding, decision-making capacity, self-government, and internal leadership are some of the elements that form the basis of university governance. These elements, which had been redeployed in the last two decades, are deeply affected by the complex relationship that universities maintain with their corresponding governmental bodies, whether at the regional, national or supranational level. A variable interplay between internal governance and power elements, external constraints, and a general narrative of promoting competitiveness and incorporating market elements, have forced HEIs to undertake profound changes in their governance systems.

This chapter explores how different models of HEI governance can contribute to fulfilling their commitment toward serving their communities as well as the global public interest. An unavoidable question that demands our full attention is the role that higher education institutions’ governance need to play to honour its commitment toward a fairer and more sustainable society. Public universities are a pole and a privileged engine for innovation and social change, and the construction and dissemination of knowledge. For universities to fulfill this role, it is essential to find governance models that allow the best articulation of the institution’s interests with the needs of its community and the global society in which they are immersed. The human factor is undoubtedly the most decisive factor for any higher education institution. Having qualified teaching, research and management staff committed to university activity is key to building resilient, innovative and socially committed institutions. The final section of this chapter addresses the challenges for HEI professionals and the reshaping of profiles in a changing world.

All in all, it should be made clear that it is not a matter of finding a single governance model and replicating it, nor a single professional profile; quite on the contrary. Particularly in complex issues like this, it is essential to think of flexible models and profiles that can incorporate cultural, national, organizational, and the institution’s own academic cultures and specificities.

2. What is the governance of higher education institutions?

The notion of “governance of higher education institutions” should be regarded as a concept evidenced by everyone involved in this sector. However, it is not so simple. As it happens, there is not a unique, broadly accepted definition of university governance. But, besides differences and nuances, all definitions of the concept focus on some common elements:

A) Decision-making: Who makes decisions about the internal government of the university and how they are made?

B) Election: How are authorities elected (even if there is some ambiguity about who counts as “an authority”)?

C) Autonomy: What is the institution’s degree of autonomy with respect to the corresponding national, regional or supranational governments?

D) Stakeholders: What is the role of other relevant stakeholders, such as students, unions, donors, and others, in the university’s decision-making processes?

E) HEI interaction: How does the university interact with other universities and research centres, especially those with which they have partnerships, alliances, or networks?

3. A brief review of models of HEI governance

In his seminal work of 1971, J. Baldridge summarizes and reconstructs three university governance models: bureaucratic and collegial and political. The bureaucratic model is based on the Weberian idea of bureaucracy. Baldridge (1971) identifies five elements that highlight the Weberian bureaucratic components of a university:

1) “Being a ‘complex organization chartered by the state’ implies that ‘the university is thus a corporate person with public responsibilities’” (p. 3).

2) Its formal and strictly ranked hierarchy.

3) The existence of internal formal channels of communication that must be respected.

4) The “bureaucratic authority relations, with some officials exercising authority over others (...)” (p. 3).

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F) Openness: What relations does the university maintain with other sectors of society, such as NGOs, civil society leaders and movements, neighbours, etc.?

G) Funding: What factors affect its capacity to have sufficient funds to develop its objectives.

The OECD (2003) defines HEI governance as: “(...) a complex web including the legislative framework, the characteristics of the institutions and how they relate to the whole system, how money is allocated to institutions and how they are accountable for the way it is spent, as well as less formal structures and relationships which steer and influence behaviour. (OECD, 2003, p. 81).

In the same vein, the Oxford White Paper on University Governance (2006) states that university governance implies not only institutional decision-making processes but also the procedures, actions, and practices implemented to achieve those decisions. Shattock (2014) emphasizes institutional autonomy, self-government, and the distribution of authority within universities as the main components of university governance and remarks on the relevance of funding arrangements. In fact, he considers that the nature of funding is “the most influential driver for change in institutional governance structures (...) because they provoke the need for new decision-making processes and demand greater attention to institutional strategies” (p. 12).

These and other definitions of the concept of governance also reveal the existence of two forces that shape the space of potential decisions: on the one hand, the heritage and particularities of each university’s own institutional culture; on the other, the conditioning factors imposed by national or supranational governments. It should be noted that these conditioning factors not only imply compliance with mandatory regulations and norms but can also set courses of action, propose curricular content, and set objectives to be pursued by HEIs. The tension between these two forces creates a dynamic tension that is often read as the limits of university self-government and autonomy, but in reality, implies a much more complex agenda (see, Frolick et al. 2013, and Kraatz and Block 2008).

The relevance of HEI governance analysis implies the recognition of the centrality of universities’ actions and performance in a global knowledge society, as well as an important role that other actors play in this endeavour. It also highlights the relationship between HEIs and governments, civil society, businesses, and citizens. Analysis of the different models of university governance, though, provides insight into how universities shape their position in the global knowledge society, in which they are key players (see Gunì, 2017). A recurring question in the literature is to what extent the influence of globalizing processes and immersion in the knowledge society contribute to a confluence in university governance models. Although it is possible to detect common features, such as the inclusion of some types of market and competition mechanisms, there are still important spaces for the expression of particularities. As Capano and Jarvis (2020: p. 12-13) have recently pointed out, while this is not to dismiss the emergence of important cross-national governance trends or growth in global systemic forces impacting national higher education systems, it does suggest that cultures of governance continue to display national specificities and that there are limits, or at least differences, in the degree to which internationalizing forces or ‘globalizing models’ impact national contexts.

In sum, different definitions of university governance have been given, but they all usually refer to a series of elements, the specific combination of which may define other models of governance that might differentiate and particularize universities across the world.
Even when models are always an abstraction, it is easy to recognize several of the abovementioned traits in current discussions about the future of universities. In fact, in some cases, an institutional palimpsest can be observed when looking in detail at any university: elements of all those models, from the bureaucratic to the managerial, can be found. Managerialism, though, still strongly influences how good university government is conceived, probably because the paradigm of competence and excellence sounds desirable for more than one group of interest or stakeholder, especially in heavy research-oriented universities. As Bleikie and Kogan (2007) state,

A powerful force lending support to the growth of managerialism has been the assertion of quite penetrative quality assurance procedures that replace the hitherto ‘trustful’ relationships between academics and their institutions as the belief in ‘transparency’ has replaced trust in expert and professional knowledge. Both research and teaching and learning are assessed by a variety of measures, including various forms of external review, benchmarking, and performance indicators, that ‘show’ judgements from the academic profession towards external bodies and institutional management (p. 480).

But those models are pre-knowledge societies, and it is time to adopt a new model that could answer the challenges of a network knowledge society. It is not that the elements highlighted by these accounts of HEI governance are no longer useful or relevant. But societies are changing fast and profoundly, and universities must do the same to respond to the challenges and pressures of our new world. When everything changes so fast, key actors must become flexible and adaptable in unprecedented ways or they will fail to survive. This is why some ideas that are missing in the more traditional accounts of HEI governance, such as their capacity to collaborate, their ability to be more open—following the paradigm of open government and open institutions that have become dominant today—and their capacity to get new stakeholders and citizens involved in decision-making processes result nowadays critical. The following section develops these three elements briefly.

4. Towards an open, collaborative and flexible model of HEI governance

As stated in the UNESCO World Report Towards Knowledge Society (Bindi, 2005), HEIs “are destined to play a fundamental role in knowledge societies, based on radical changes in the traditional patterns of knowledge production, diffusion and application.” (p. 87) This concept of knowledge society and the universities’ role in it is also very challenging to universities. It fully recognizes HEIs as key actors in producing and disseminating knowledge, but they are no longer the sole actors that can or should create and disseminate knowledge. In fact, the main concept of knowledge society states that knowledge production and dissemination is distributed among different actors, from the public and the private, from the non-profit and the for-profit, from the formal and informal sectors. It also implies that HEIs are requested to open their institutional boundaries and establish effective collaboration channels with other organizations.

That requirement poses new challenges in terms of university governance. But, as Carvalho (2021) says, it is important to avoid dichotomous interpretations of the policies and practices established by HEIs in that context, usually too pessimistic or too optimistic, bringing back to the discussion the relevance of institutional, social, and political particularities in that respect.

Returning to the question posed at the beginning of this chapter, it is important to identify which model or combination of models of university governance favours the best fulfillment of the mission of universities in the midst of the knowledge society, in an interconnected world that requires collective efforts to solve crucial global problems.

Without wishing to promote a standardized approach, four elements should be carefully considered regarding successful governance models: respecting the vernacular institutional culture, guaranteeing the participation of the entire academic community in decision making, promoting the appropriate combination of elements of competition and collaboration with other universities, and promoting the participation of the local community in university affairs.
Regardless of the particularities of each case, there is a common factor that cannot be ignored: the leadership exercised by university authorities and their staff, both academic and non-academic. Any proposal to transform the governance system must empower the autono-
mous leadership of each institute, or it will be doomed to failure. As Capano and Jarvis (2020) state “[u]niversi-
ties bring together groups of individuals performing very different jobs (e.g., the job of a biologist versus that of a historian, or the job of a computer technician versus that of a help desk employee), numerous inter-
twined decision-making processes, and a great variety of institutional outputs (...).” (p. 7) Understanding and respecting that complexity requires a leadership style that is not easy to find, because governing a university is an extremely turbulent process that requires unique skills. Especially now, when trying to build HEIs that can integrate and collaborate with institutional peers, na-
tionally and internationally, is one of the inevitable tasks that must be undertaken.

Finally, and in the same direction as the previous para-
graph, how can universities involve new stakeholders and citizens in their actions? How to make the institu-
tions more permeable without jeopardizing the values of university autonomy and academic freedom? How to reconcile the seemingly exclusive objectives of pursuing academic excellence and the inclusion of marginalized sectors of society from access to the university? The answers to these questions are by no means simple, nor can they be answered by a single person. The very reflection on the governance systems of universities tests the self-critical capacity of the aca-
demic community and should invite us to explore paths of universities tests the self-critical capacity of the aca-
demic community and should invite us to explore paths

of academic disciplines and with a capacity of their research function. They will be more open to co-
creation with social institutions and citizens, more attentive and committed to the impacts of their research on society. The answers to these questions are more different than on academic disciplines, and with a clear focus on the social, cultural and economic appli-
cability of their research function. They will have a local and global focus and the capacity to work in a network at international scale on challenges, specific projects, interuniversity partnerships or knowledge partnerships with companies, institutions and civil society.

This process of reformulating professional profiles in higher education institutions will also occur in the management area. First, professionals will need to have a higher level of qualifications, given that an increasing number of repetitive, automatable tasks will be carried out by machines, robots and software. Management professionals will be required to have greater added value and the highest level of specialisation and efficacy.

One notable aspect in this area is the increasing blu-
rining between teaching and research staff on the one hand had management staff on the other. This division, which was very clear until a few years ago, will gradua-

Part 1: New Contexts, New Visions

5. Professionals in higher education institutions: changing profiles in a world in transformation

The human factor is undoubtedly the most important for any higher education institution. Having qualified teaching, research and administrative staff who are committed to university activities is vital to construct institutions that are resilient, innovative and socially engaged. This was also the case in the past: attracting and retaining talent has been an essential strategy for the proper function of education and scientific research, and for effective and efficient management.

However, the profile of higher education institutions’ professionals is changing and will continue to change significantly in the coming years. According to the teaching function, new profiles of academics should be hired who are experts in a set of new disciplines, in line with the technological and socioeconomic revolution that we are experiencing. The role of teaching staff is also being transformed to a great extent. In the past, teachers were figures who possessed knowledge and information. Now, their role is mainly as mentors and tutors who support students in their training and deve-

loment, as qualified professionals and citizens. The extensive and intensive use of digital possibilities and information and communication technologies will revo-

lutionise classrooms and ways and times of teaching. Consequently, the function and pedagogical strategies of teachers should be reconsidered. The research task will also need new professional profiles. It will require people who are more experienced in collaboration and teamwork with experts in other dis-


New Visions for Higher Education towards 2030

versities should work with and for society to be able to develop the knowledge society together, to cons-

tuct what is known as the democracy of knowledge and to become more cultured, resilient, critical and collaborative societies.

Management and leadership in a broad sense should also be discussed. Here, we refer to intrainsitutional leadership for the strategic management of institutes and the leadership of schools, faculties, departments and institutions of all kinds within higher education institutes. We refer to the leadership of teams, which are increasingly hybrid and multidisciplinary. We refer to integrative leadership that promotes everyone’s collaboration and participation to reach shared goals. However, we also refer to leadership outside of ins-

stitutions, with other social, political and economic agents or citizens, through specific missions or pro-

jects. Higher education institutes of the present and the future require solid leadership that is effective and inclusive. At the same time, this leadership must extend to society so that higher education institutes become real beacons in the task of working towards the progress, wellbeing and competitiveness of socie-

ties. For these reasons, the training of managers and shared, solid leadership should be given sustained attention as a priority.
References


GUNi Vision
The vision of the Global University Network for innovation (GUNi)

The development of a vision helps us to define the final point we want to reach; what we want to become and attain within the timeframe. The vision aims to inspire horizons of transformation and should enable us, by observation, to outline institutional strategies and objectives, as well as the action plans to achieve them.

The GUNi World Report, entitled New Visions for Higher Education Institutions towards 2030, aims to define recommendations for universities worldwide within this timeframe. Our main focus is on institutions, without losing sight of their embeddedness in higher education systems. Higher education institutions (HEIs) are called on to rethink their social function and strategies in the coming years in the context of major technological, economic, social and cultural transformation. Therefore, the GUNi World Report focuses on universities and their capacity for transformation and innovation in this change of era and within the timeframe of the United Nations’ 2030 Agenda.

This vision is drawn from GUNi’s fundamental values and mission and our desire to promote the transformation of higher education institutions towards greater public service, relevance, social responsibility and innovation. Likewise, at GUNi we promote the exchange of resources and experiences and seek to encourage group reflections and the joint production of knowledge for change. The vision being presented is also therefore drawn from the contributions and views of GUNi’s members.

Moving beyond words, this vision creates a space for active transformation which, together with the report as an instrument and the focus on institutions, without losing sight of their embeddedness in higher education systems, supports the richness of a plurality of models. There is no ideal, single model of university to which we should aspire. Instead, there are a range of models which are equally valid and relevant. We advocate the promotion of institutional plurality as a source of richness and a necessary response to diverse social contexts and needs. What makes university institutions equal is the desire to achieve quality in service to society.

We know that knowledge, talent and scientific research have become key factors in progress and well-being. Although universities have lost the monopoly on knowledge (which is increasingly widespread), they are now key institutions in the knowledge society. Making a commitment through public policies to construct innovative universities is vital if we want to build societies and economies that are resilient, sustainable and progressive. Universities could become beacons for society and leading institutions. They could serve as a space for testing and innovation. They could become centres for discussion and co-creation, taking advantage of their neutrality and prestige. They could be catalysts to ask the right questions and establish ways of working with other social players to find potential solutions.

In this context, it is essential to reflect on the added value provided by HEIs, focussing on the guidance and support provided during the training process, the sense of community and network, the transmission of frameworks and learning pathways at different times of life, interdisciplinarity and encouragement of the capacity for discernment, all of which contribute to individual and social transformation.

Starting point

Our starting point is to consider higher education and knowledge as public goods which must be preserved and promoted by governments and public institutions to enhance progress, well-being and competitiveness. This means opening up higher education, knowledge and research to society (both public and private institutions), and establishing policies for equal opportunities, equity and access to higher education.

Given the trend in recent decades for a certain degree of standardisation of higher education institutions (for example, through indicators, standards and rankings that prioritise research and the impact of scientific publications over teaching and learning), our focus is on institutions, without losing sight of their embeddedness in higher education systems. Higher education institutions (HEIs) are called on to rethink their social function and strategies in the coming years in the context of major technological, economic, social and cultural transformation. Therefore, the GUNi World Report focuses on universities and their capacity for transformation and innovation in this change of era and within the timeframe of the United Nations’ 2030 Agenda.

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The complexity of social problems today, at local and global level, requires expert and scientific knowledge to introduce the most suitable public policies. Dialogue between politicians, public management and academia should be continuous and promote social advances and progress. A good example of this can be found in the crisis caused by the Covid-19 pandemic and the extraordinary effort made by universities and research centres and their respective governments worldwide to create and share knowledge in record time.

As mentioned above, the world is facing enormous political and social challenges; these include poverty, inequality, mass migration, xenophobia, populism, the climate emergency, technological and scientific revolution, and the required environmental, social and economic sustainability. We believe that universities, in this context, must position themselves socially with all the rigour that should define them, and all the conviction of institutions working for the common good and the progress, peace and well-being of humanity. We therefore call for universities that are committed and open, not closed in on themselves and self-satisfied.

This social responsibility must be translated into a clear institutional commitment:

- to students, putting them at the centre of the university mission and promoting their training as critical, free citizens and qualified professionals;
- to knowledge and science, constructed with and for society;
- at local and regional level, including the social and cultural fabric, the regional economic framework, public institutions and the community;
- at global level, by creating close links with institutions and networks worldwide to work together towards academic, diplomatic and advancement in education, science and culture as a source of collective and individual progress.

The social responsibility of universities has an excellent framework in the United Nations’ 2030 Agenda and the 17 Sustainable Development Goals. Indeed, the 2030 Agenda establishes the main challenges and commitments for humanity and enables the design of a tool to reflect universities’ institutional policies.

The Covid-19 crisis, with all of its severe consequences for humans and health, has also caused an immense social crisis. In education, it has led to an increase in inequality and once again revealed the power of the work done in schools, institutions and university faculties to fight against inequality and promote social mobility and socialisation. In addition, as we know, the pandemic has acted as a great accelerator in the rethinking of education in the digital era and has shown the advantages (and limitations) of the intensive use of communication and digital technologies for education throughout life.

How to achieve the vision

Reconsidering university institutions in this change of era is no simple task. We must break down the inertia and the institutional strategies that promote and amplify all the expertise and creativity of university professionals. This means constant investment in institutions’ human capital and the professional development of teams with a strategic vision. Universities must work to expand management and administrative teams, organise themselves more autonomously through missions and projects, and focus on being organisations that learn, adapt and unlearn.

Considering the potential of institutions and focusing on their agency, we must not lose sight of the fact that they are part of higher education systems which, in terms of structure, policy, politics, finance, quality standards, governance and laws, demand possibilities and delimit change. However, it is a matter of transforming and accommodating institutions and the system at the same time in order to meet the challenges that lie ahead.

The strategic capacity of universities must be based on broad institutional autonomy and, at the same time, full and exacting reporting to public authorities and society. In many countries, government actions can be observed that limit or question the autonomous capacity of universities. Some governments burden universities with procedures and controls that have
Main areas of transformation

Beyond what has been stated already, our vision is based on seven main areas of transformation. All of them are considered critical in the rethinking of university systems and focusing them on the 2030 Agenda and Sustainable Development Goals. The areas are:

- **Sustainability**
- **The digital-human future**
- **The future of work**
- **Citizens**
- **Knowledge**
- **Internationalisation**
- **Governance and professionals**

1. **Sustainability: reinventing universities for a sustainable future**

    Sustainability can no longer be a general concept or a simple coat of varnish to be applied every ten years. Instead, sustainability must form a central part of the mission of higher education institutions, through radicalism and the generation of strategic programmes and initiatives. Universities must become driving forces behind the spread of sustainability while at the same time taking on a great responsibility for it.

    We must make a commitment to including sustainability in a way that cuts across all aspects of higher education and avoids an isolated conception of sustainability as a subject or practice to be incorporated. Universities’ contribution ranges from training and teaching to scientific research and knowledge transfer, promoting a new vision of their relationship with the world and the environment to transform HEIs’ operation, management, training and research. Universities’ responsibility also extends to agreements and commitments with other social, economic and cultural agents to jointly create transitions to sustainability.

    We adopt a broad definition of sustainability that encompasses environmental, social and economic factors. In the educational field, social sustainability is closely related to universalisation of the right to education, the extension of training throughout life for everyone, gender equality, and direct support for minority and marginalised groups. In education, economic sustainability defines knowledge and education as common goods which must be preserved and promoted, with equal opportunities and policies for equity and redistribution.

    Education and universities should be seen as real drivers for change and the sustainable transformation of our societies at local and global level. Globally, they can lead international collaborative programmes and projects that could address any of the 17 Sustainable Development Goals. At local/regional level, they can promote sustainability by educating through example or collaborating on sustainable development initiatives in the territory, society and the economy.

2. **The digital-human future: constructing more inclusive, accessible universities**

    Digitalisation entails a great social, economic and cultural transformation that directly affects the foundations of higher education and university institutions. Digitalisation and widespread information (and disinformation) make possible it to reconsider the education function from top to bottom: the role of teachers, educational spaces and timetables, teaching methods and curriculum organisation. Digitalisation has also led to the emergence of private suppliers in the educational field, who, in many cases, treat training as a highly profitable source of business with high demand in many countries. As we well know, the Covid-19 pandemic suddenly accelerated digitalisation at all stages of education, with little planning and very uneven results.

    We consider digitalisation to be a powerful instrument for universal, inclusive and efficient education, constructing digital ecosystems for learning. In this area, we advocate blended university training models which at all times seek the potential of digital technologies at the service of learning and the richness and benefits of face-to-face on-campus training and added-value interactions.

    Once again, we do not believe in just one model of university institution, but rather the introduction of a great diversity based on a range of educational models and the use of digitalisation, including high-quality universities that are completely online. Digitalisation breaks down the classroom walls and it is inevitable that all HEIs will eventually end up working with digital technologies to design and teach courses online.

    Digital technology can also maintain and increase social inequalities and exclusions, as the experience of the pandemic has revealed, especially in the field of education. Advances in technology are associated with the many dimensions of the digital divide, including physical and economical access to technology, resources and connections on equal terms and of the same good quality, cognitive abilities to assimilate, understand and use the whole potential of technologies, social access in terms of freedom from censorship and lack of bias in information, free circulation of knowledge and protection with regard to risks and security concerns.

    Given the multiple dimensions of the digital divide, we are committed to the extensive digital training of citizens and the construction of good learning models that promote flexibility and adapt to different types of students and needs. At the same time, we call for investments and public policies focused on reducing divides. We must continue to work to reduce gaps through public funding of universities, regulations to guarantee quality education on physical campuses and in online studies, and a wide range of grants and financial aid for students. Special mention must be made of the vital investment in continuous training of academic staff on the use and implementation of digital technologies and adaptation to new trends that could be brought about by technological advances in teaching and research.

    Digitalisation should also enable us to make education more personalised, by providing opportunities for
different educational models and learning strategies to promote lifelong self-management. Similarly, now is the ideal time to take advantage of the potential of digitalisation to bring about educational revolution and knowledge transformation through digital tools.

3. The future of work: training in competencies and skills throughout life

The job market is in the midst of a transformation, with radical changes that are affecting the classical conceptions of the industrial era. As higher education institutions are responsible for training qualified professionals, they must lead and respond to these challenges appropriately.

Universities should put teaching and training at the heart of their mission. They must be allocated sufficient resources to nurture future professionals and citizens and meet the training needs and demands of the current workforce in the field of lifelong learning. This calls for incorporating students at the centre of universities’ raison d’être. Students should be supported in their development and empowered in this context of a complex, dynamic job market. To achieve this, there are five key, complementary aspects that must be specifically worked on. They are as follows:

- Training in competences and deep knowledge, but also in human and social skills, resilience, critical spirit, analytical capacity, creativity, innovation, social commitment, global citizenship, etc.
- Full acceptance of the paradigm of training throughout life. This means introducing a real university for all ages and stages in higher and permanent education: skillling, reskilling, upskilling, micro-credentials and professional retraining.
- Interdisciplinary training with a focus on current and future economic, social, cultural and technological problems and challenges.
- The widespread introduction of practical and applied training with all its related opportunities, in close collaboration with other players and including dual training, work placements, service learning, etc.

The availability of international training for all students through international mobility programmes, co-creation programmes, stays and exchanges, and the promotion of new models of internationalisation at home for all students.

This should be achieved while at all times promoting equity, equal opportunities and the participation of vulnerable groups and minorities in higher education. In addition, extensive student support programmes are required, including grants, salary grants and social aid. These challenges and key aspects must be worked on in collaboration with economic and social agents, governments, citizens and the business sector in order to obtain broad consensus and solid, lasting value propositions.

4. Citizens: promoting humanist values and profiles in a changing world

Universities have the mission to train free, critical citizens who are socially and globally committed. In recent decades, this function has been overlooked in favour of technical training for professional qualifications and entry into the job market. We advocate comprehensive training that goes beyond this division between training for citizenship and training for professional qualifications. Higher education institutions in today’s complex, dynamic world must regain the values of free, critical, committed citizenship. They should defend these values with determination and apply them in all their fields of activity: training, scientific research, knowledge transfer, innovation, social commitment and internal management.

This institutional commitment should strengthen democracy and the values of human rights, dignity, equality, coexistence, divergence and disagreement, as well as respect for minorities. In accordance with their universalist aim, universities must help to construct a universal ethic which is shared by all humankind. HIIs’ social responsibility includes the construction of peace and freedom, training in peaceful conflict resolution and boosting of community-based research, listening to social players not only for productivity improvement, but also to provide training in world citizenship and peace management. They must do this by moving away from centralism and neocolonialism, respecting and promoting cultural and linguistic traditions from all places and treating them as global cultural heritage that must be preserved.

Training in values and humanist profiles should be extended throughout institutions and included in courses on science and technology. In a highly technical world with challenges such as artificial intelligence, robotics, the use and management of big data, the environment and commercial and economic globalisation, humanist values must permeate all syllabuses for the comprehensive training of students. New paradigms are needed, such as digital humanities and environmental humanism. Likewise, these values must accompany scientific research activity at all times, in order to bring about a better, more habitable world and establish ethical and human frameworks for scientific, social, cultural and technological development.

The fight for free, critical citizenship is also a fight against disinformation and in favour of knowledge democracy. In this situation, collective decision-making is based on evidence and scientific rigor. At the same time, a participatory democracy that works for the common good is promoted at all times.

5. Knowledge: putting research and innovation at the service of social challenges

Knowledge is becoming a critical factor for the progress, well-being and competitiveness of societies. In what is known as the knowledge society, science, technology and talent are key factors for building progressive societies. In fact, some of the disputes between countries at international level are aimed at achieving a competitive advantage in technological and scientific capacity in various fields and all kinds of applications. Of course, universities play a key role in society and knowledge democracy. However, they have lost their monopoly on knowledge and therefore need to forge partnerships and collaborations with other agents: public institutions, companies and organised civil society. We must construct open universities which at all times facilitate these collaborations with other agents and focus on the advance of culture, science and knowledge, as well as its social and economic application.

We are committed to responsible research and innovation; research that is carried out with and for society. We are committed to social participation in scientific developments and scientific dissemination and communication as tools to bring these developments closer to all citizens. We advocate academic knowledge and innovation that applies not only to natural and technical sciences but also includes social sciences and humanities. In this context, we promote open science as a universal common good that must be jointly constructed and shared.

We want to develop entrepreneurial universities at the service of society that strengthen entrepreneurial capital through their leadership, knowledge and research and training activities. Universities should foster cross-disciplinarity and have a cross-cutting vision of social problems beyond the classical academic disciplines. They must promote complex thought and have a global, inclusive vision.

We aspire to a broad, multidimensional conceptualisation of university quality that considers questions such as equality, inclusion, autonomy, critical capacity and creativity, all of which are essential to the public, scientific and cultural value of higher education institutions. In this regard, we propose a shift from individualist research models to cooperative transformation-oriented approaches. In addition, new metrics should be developed for assessing the academic and scientific activity of teaching staff that value the social impact of scientific research, its dissemination and eventual application.

6. Internationalisation: reinforcing partnerships to attain common goals

In recent years, internationalisation has become one of the main focuses of university strategy to gain an international position and compete in the league of top universities. The knowledge and shared information society has led higher education institutions to become consolidated as nodes of multilevel networks that create and disseminate high-quality knowledge organised into alliances and other collaborative models. At
the same time, globalisation and advances in internatio- nal transport have made student and academic mobility a key factor in the international standing of institutions and the circulation of knowledge.

However, with the Covid-19 crisis, internationalisation activities suddenly had their modus operandi curtailed to a certain extent, with almost non-existent academic mobility in the last two years. This has increased the importance of strengthening new models of interna- tionalisation. These models were already in existence, in some cases for over thirty years. Examples include internationalisation at home and internationalisation of the curriculum. These models are spreading to new con- texts and have gained more relevance this decade. New forms of internationalisation, along with the possi- bilities offered by technology, have increased the capacity of universities in their mission to train critical citizens with global competencies and knowledge, and the ability to make decisions that have a local, natio- nal and global impact. These new forms mean that the multicultural dimension has been incorporated into the construction of the global knowledge, vision and mana-gement of higher education institutions. In addition, they reinforce universities’ mission to be inclusive and fairer, and to guarantee access with equal opportunities.

Digitalisation has provided new approaches to interna- tional collaboration and cooperation, through methods such as virtual exchange, collaborative online inter- national learning (COIL) programmes, co-creation, co-teaching, blended mobility and virtual classrooms. Combined learning enables the diversification of internationalisation and encourages universities to coo- perate internationally by sharing tools and experiences. In a framework of collaboration, university partnerships, international associations and programmes to promote university cooperation and coordination have once again been deployed, as well as the new model of interna- tionalisation based on the creation of collaborative projects with institutional, business and social players. This new form of internationalisation and cooperation has allowed universities to participate in the global knowledge construction and transmission and are key agents in the envisioned horizons.

Higher education institutions are singular organisations with centuries of history. They are dedicated to knowle- dge creation and transmission and are key agents in the progress, well-being and competitiveness of societies and countries. Universities have often been the first to respond to new challenges, as inverted pyramids, as their main component, with the greatest capacity for action, are their professionals: teaching and research staff, administrative and mana- gement personnel.

Any university institution (whatever its profile, focus and characteristics) must therefore make a clear com- mitment to its professionals by providing training, retaining talent and fostering professional develop- ment. For the transformation of universities, it is vital to ask which profiles of teaching and research staff and administrative and management staff should be encour-

gaged. They must enable us to build resilient, innovative and socially committed institutions.

In particular, we should mention the promotion of gender equality and the acquisition, retention and pro- motion of female talent. We must break the glass ceiling that still affects teachers and researchers in particular. Along these lines, we should implement specific poli- cies that reduce gender and modal inequalities, and contribute to the full professional development of young women and girls in universities. This also means promoting women to the management and academic positions at the heart of universities.

We believe that we must overcome the existing barriers between teaching and research staff and management. This approach must be driven by the universities’ strategic goals and management and academic staff should enable full participation in universities’ strategy- tic tasks, including critical areas such as digitalisation, sustainability, internationalisation, laboratories and infrastructure, teaching and research management, and even participation in direct aspects of teaching, research and innovation. In addition, we are commit- ted to the utmost professionalisation of management teams. The availability of professional, highly qualified management and academic teams is an essential factor in the strengthening of institutions and making them more efficient with a greater social impact.

In the organisational area, we demand full university autonomy that is real and effective. It must always be accompanied by transparent reporting to institutions and society and, at the same time, should be enforced by specific regulation and financial support for HEIs. If the goal is to move forwards and take action, it is impor- tant to draw up strategies on where and how universities can be empowered and what their agency is, taking into account their specific location within policy, the poli- tics of national and international systems, and quality assurance standards and governance. Autonomy is therefore related to accountability and quality, and is also linked to the construction of knowledge and HEIs’ agency for innovation and transformation. Institutional autonomy is the way to construct more flexible, innova- tive organisations and avoid unnecessary bureaucracy that does not generate added value.

We are unquestionably committed to participation within the university community in the governance of higher education institutions, which must coexist along- side professional, flexible and efficient management. Decision-making must be democratic and participative and not paralysing. It should coexist alongside the need for flexibility and professionalisation in university admi- nistration and management. Finally, we consider that social participation in university governance should be promoted. Bridges must be built for collaboration in training, research, transfer and innovation. Singular and strategic projects for the country must be promoted with institutional, business and social players.

A vision for an ongoing process

The vision defined here helps us to set horizons of trans- formation for higher education institutions. As noted, the vision aims to inspire the construction of institutio- nal strategies, objectives and action plans to achieve the envisioned horizons.

In this sense, GUNi will continue to generate reflection and knowledge, one of its core missions, by enriching the content of the new Higher Education in the World Report. This report is a living document, not only deve- loped in printed and downloadable format, but also launched on a live webpage where new contributions will be added in the form of papers, videos, interviews and podcasts. The overall aim is to contribute over the period 2022-2025 by giving voice and bearing witness to new ideas, contributions and actions relating to higher education institutions and systems as they move in the direction of the 2030 Agenda, along the lines marked out by the GUNi vision.

Moving beyond words, the vision creates a space for active transformation which, together with the report as a whole, will constitute the stepping stone for a wider and more ambitious project entitled “GUNi Interna- tional Call for Action (2022-2025): Rethinking HEIs for Sustainable and Inclusive Societies”. This project will be one of GUNi’s key strategic lines of action for 2022-2025 and will seek to encourage HEIs around the world to deploy the actions and changes that are needed to adapt and become more relevant, inclusi- ve, effective, innovative and socially responsible. The overarching aim is for the International Call for Action and the special issue website to become a key open space for contributions to the transformation of HEIs around the world.
The second part of the report, which is called "Transitions: Key Topics, Key Voices", seeks to analyse and describe how we could move towards this new vision by tackling core issues and topics in higher education. As its title suggests, the second part aims to respond to how we go from where we are now toward our vision for HEIs by delving into the key topics of the first part and giving voice to leading experts and actors in the field of higher education.

In particular, the second part includes a real-time approach to what is currently being done, focusing on what HEIs around the world are doing in response to the needs, challenges, crises and transformations analysed in the first part. For this purpose, seven key topics have been selected:

- HEIs’ governance and public service: between autonomy and community engagement
- Skills and competences: A humanist vision for a changing professional world
- Research and innovation: towards open, ethical and responsible research and innovation
- Sustainability: reinventing the role and place of HEIs for a sustainable future
- ICTs and digitalisation: a digital–human future towards more inclusive and accessible HEIs
- International higher education: from competition to collaboration
- Higher education management: promoting new leaderships and innovation

Each of the topics is covered by a number of articles in which contributors set out the challenges, actions and findings and provide inspiring examples of HEIs that are working on initiatives, new developments, changes and innovations to adapt to the new context.

Experts from all over the world have constructed the content of these chapters based on their own particular areas of expertise. As a result, their perspectives are unique and uniquely their own, based on their own particular blend of ontological, professional and geographic principles. That said, neither their selection of approaches nor their choice of terminology implies any particular preference or inclination of GUNi in one direction or another.

In this abridged print version of the report, the following pages introduce the experts’ contributions through their respective abstracts. The complete version of their contributions can be found at the report’s website: www.guni-call4action.org.

What makes the report unique is that it will be a living document. Throughout the period 2022-2025, new contributions will be added in the form of papers, videos, interviews and podcasts, giving voice and bearing witness to new ideas, contributions and actions relating to higher education institutions and systems as they move in the direction of Agenda 2030 along the lines marked out by the GUNi vision.

In this respect, it is important to note that the report aims to be a stepping stone in a wider, more ambitious project entitled "GUNi International Call for Action (2022-2025): Rethinking HEIs for Sustainable and Inclusive Societies". This project will be one of GUNi’s key strategic lines of action for 2022-2025 and will seek to encourage and help HEIs around the world to deploy the actions and changes that are needed to adapt and become more relevant, inclusive, effective, innovative and socially responsible. The overarching aim is for the International Call for Action and the special issue website to become a key open space for contributions to the transformation of HEIs around the world.
2.1 HEIs’ governance and public service. Between autonomy and community engagement

Public Service and Governance. Re-thinking the nature of Higher Education Institutions in the 21st Century

Sijbolt J. Noorda

- It is hard to find a university that would not subscribe to contributing to public service.
- Why should we then be re-thinking the nature of Higher Education Institutions and their relation to public service if this function is not an option?
- The main reason for the relevance of this topic is changing circumstances, such as nationalist political revivals, societal fragmentation and monopolising debate and public institutions.
- Universities must monitor their in-house operations and provisions, as well as their understanding of the public good, to see whether they are in keeping with what is required of them.
- To this end serious deliberations on core values, profile and mission are crucial, as well as the safeguarding of universities as open and tolerant spaces, welcoming debate and diversity.
- In this respect, universities have a lighthouse function in society. Last but not least, universities should review their current programmes and partnerships to see whether they are serving general public interest.
Community engagement in higher education: a vision for European policy and practice by 2030

Thomas Farnell and Ninoslav Šćukanec Schmidt

- Over the past four decades, increased attention has been paid globally to the engagement of higher education with society as the ‘third mission’ of higher education.
- However, in Europe, the focus of most third mission policies has been overwhelmingly on the universities’ contribution to the knowledge economy.
- Recently, however, there has been a shift in European policy towards universities’ role in addressing a broader scope of societal needs.
- This paper will argue that the concept of community engagement in higher education should become a central concept in the debate about the societal role of higher education in Europe in the coming decade.

From words to actions: A call for international guidelines on implementing academic freedom

Robert J. Quinn

- According to the latest data in the global Academic Freedom Index, while 94% of the global population live in countries that have legally pledged to respect academic freedom (de jure protection), only about 20% live in countries where academic freedom is well respected in practice (de facto protection).
- The gap exists despite many state and institutional pronouncements on the importance of academic freedom.
- The last two years alone have seen reports, statements, decisions, declarations, resolutions, and communiqués on academic freedom at the EU, the Council of Europe, the Inter-American Commission and the United Nations.
- All of these are important and welcome. But they point to the need for authoritative, international guidelines on implementing academic freedom, guidelines that cover the core elements of academic freedom, including legal protection; institutional autonomy; equitable access; professional and personal expression; sanctions, restrictions or loss of privileges; student expression; and shared responsibilities to protect academic freedom.
- Such implementation guidelines would provide a roadmap for increasing respect and protection, and a checklist for assessing adherence to existing state-level obligations.
- International guidelines on implementing academic freedom could be developed by an international expert working group, but greater impact would result from responsible state actors endorsing the guidelines concept and leading efforts to secure recognition and promulgation at the state level through regional or global institutions.
2.2 Skills and competencies. A humanist vision for a changing professional world

This chapter discusses the implications of technological change and demographic trends for higher education supply and demand.

It argues that technology is fast changing the nature of occupations and the division of labour between humans and machines, which is changing the demand for skills; technology is changing the nature of work, with further implications for the demand for education; demographic trends, combined with fast technological change, are creating a new market of HEIs for adults with different characteristics from those for young people; technology brings new affordances in the form of new pedagogies and new tools for education.

This chapter also examines how higher education institutions (HEIs) are responding to these technological and demographic trends. Online learning is becoming more ubiquitous. We also review how HEIs are beginning to use technology to document students’ learning outcomes, facilitate peer-to-peer assessments, automate the recognition of prior learning, track employers’ skills needs and provide career guidance for students.

HEIs are also increasingly responding to upskilling and reskilling demands, creating bigger and better staffed departments of continuing education, developing new shorter, stacked qualifications, and providing more granular micro-certifications, incorporating learning management tools and exploring the potential of automating prior learning recognition and career guidance.

Understanding these changes is important for HEIs to remain relevant and continue to help people to acquire the right skills in a rapidly shifting education and labour market.
From Homo Economicus to Persona Implicitus: The concept of students in the Anthropocene age

Keri L. Facer

- Universities are designed around and governed by particular ideas about students.
- As this idea changes, so does the university. Indeed, the key long term historical shifts in universities’ structures and purposes have been accompanied and driven by equivalent shifts in the idea of what it means to be human and what sort of world we are preparing our students for.
- Western European enlightenment, humanism and neoliberal economic traditions have produced two dominant ideas about students that are in conflict today: a) The ethical-critical humanist and b) The self-maximising economic actor.
- Neither of these is adequate for an era characterised by climate change, disruptive technologies, polarising and precarious economies.
- What it means to be human and our understanding of how humans might create economic security for themselves is changing profoundly.
- To that end, this paper proposes a shift away from the dominance of homo economicus as a coordinating idea for universities.
- Instead, it suggests considering students as persona implicitus: A student who is already and will always be dependent upon and implicated within social, living and technological systems and relations.
- The promise of higher education under these conditions must be to help students understand and become aware of their interdependencies with each other, the planet, and their technologies, and to develop the capacity to create relationships that nurture and sustain the resources we share in common, and which underpin security and progress for all.
- We are no longer teaching autonomous humans; we are teaching people who are permanently and already embedded in an ongoing and changing world populated by other human and non-human people, the encounter with which is precisely what constitutes the educational experience.

Demand for new professional knowledge, skills and competencies in the labour market: higher education, covid-19 and artificial intelligence

Francisco López Segrera

- The aim of this paper is to demonstrate the need for learning focused on the formation of specific skills and competencies.
- To achieve this, the curricula of universities, higher education institutions and vocational training centres must teach relevant knowledge that enables proper entry into the labour market.
- This leads to a need for the adoption of visions and strategies to transform higher education.
- The pandemic has increased inequality between regions, countries and social classes. It has brought about changes of great relevance in education and higher education and in its potential scenarios and future prospects.
- It has increased the need for certain skills and competencies that the labour market requires in this situation.
- We analyse how good practices are being developed in the Latin American region in public and private universities.
- The aim of these practices is to equip students with certain competencies and skills so that they can carry out their functions properly after graduation and enter the labour market without difficulties.
2.3 Research and Innovation. Towards open, ethical and responsible research and innovation

- There is a broad consensus that research and innovation (R&I) must be steered towards socially desirable ends, ensuring that science and technology are the driving forces behind social progress.
- This puts the current R&I system under increasing pressure to become more inclusive and responsive to current and future societal challenges.
- Although the critical issues of Responsible Research and Innovation (RRI) have been gaining academic awareness and political support as tools to move European R&I governance forward, there is broad recognition that the engagement of civil society organisations and citizens has been suboptimal in defining R&I priorities.
- Here it needs to rethink the role of higher education institutions and their contributions to society in a context of rapid transformations and world crises.
- Citizens all around Europe are already showing increasing interest in participatory activities: their engagement in social movements and voluntary associations as well as science-related activities such as Citizen Science are clear signs of their willingness to be active players in the field.
- This paper introduces and reflects on the different concepts of co-production of knowledge, knowledge exchange and knowledge mobilisation, such as Community Based Research, Citizen Science or Science Shops.
The Emergence of the Global University

David B. Audretsch, Erik E. Lehmann and Jonah M. Otto

- This paper explains the constituents of the Global University, what differentiates it from its predecessor, the reasons for its emergence and why it is likely that global universities will acquire competitive advantages in the future.
- The global university represents a sharp departure from the conventional Humboldt university model in that the source of value is not dictated by traditional academic disciplines or “knowledge for its own sake”, but rather, as has been the case for the entrepreneurial university run by a broad range of external stakeholders.
- However, these stakeholders have an increasingly global perspective, in which students, faculty, research and societal impact are not geographically bounded by city, regional or national borders.
- Commodified education, research and societal impact will rarely be able to compete in the globalised market for higher education services/products.
- Instead, the competitive advantage for the Global University emerges in services and products that resist commodification, in that they are firstly based on authentic relationships.
- This paper provides relevant examples of best practices for globalising teaching, research and social impact.
- The paper concludes that the successful Global Universities of tomorrow will prioritise authentic relationships to provide unique and compelling value to global stakeholders.

Knowledge Democracy and Higher Education

Budd Hall and Rajesh Tandon

- The call for decolonisation of knowledge and higher education grows.
- In South Africa, this call has been for ending what has been experienced as a form of intellectual apartheid in South African Universities whereby the dominant theoretical foundations of the academic disciplines are of European origin mostly written by white European or North American authors.
- In Canada, one of the authors of the discussion focuses on how higher education institutions are challenged by Indigenous ways of knowing, learning and teaching.
- In India, the calls for a decolonising project can be heard from voices of civil society and social movement structures as well as directly from the urban poor, women victims of violence, Tribal peoples and others labelled as subaltern.
- Our contribution to this important world report consists of a discussion about the concepts and principles of knowledge democracy, the origins of the domination of Eurocentric knowledge systems, and stories about what higher education institutions in various parts of the world are doing to address the challenges of knowledge democracy.
- An extended discussion of these ideas can be found in our recent book on Socially Responsible Higher Education: International Perspectives on Knowledge Democracy (Hall & Tandon, 2021).
Open Science: reflections for universities as agents of paradigm change

Eva Méndez and Núria Bautista-Puig

• Universities are fundamental niches for research and knowledge generation.
• Ensuring that the results of research are freely accessible, and promoting a more collaborative and participatory science, is essential to improving the effectiveness of R+I systems, and to opening up Universities’ knowledge to the society that sustains them.
• Open Science implies a new paradigm promoted by the European Commission and embraced in November 2021 by all UNESCO countries, the aim of which is to move from ‘publish as quickly as possible’ to ‘share as soon as possible’.
• This document characterises Open Science and includes fundamental reflections for its implementation by Universities, taking into account the key role of higher education institutions (HEI) in the effective shift to a new research paradigm, providing examples, initiatives and pointing out the main problems that researchers face in putting Open Science into practice.
• However, also reflected here is the commitment of many universities and university alliances to Open Science, particularly in Europe, through the creation of the new European Research Area (ERA), in which OS is a structural element.

2.4 Sustainability. Reinventing the role and place of HEIs for a sustainable future
Transgressive learning, resistance pedagogy and disruptive capacity building as levers for sustainability

Arjen E. J. Wals

- If higher education is to make a significant contribution to the transition towards a more sustainable world, it will need to break the resilient practices of ‘business-as-usual’ that normalise growth orientation, individualism, inequality, anthropocentrism, exclusion, exploitation and even catastrophes.
- Doing so requires more than cultivating often-mentioned sustainability competencies and qualities such as handling complexity and ambiguity, anticipating and imagining alternative futures, taking mindful action, having empathy and agency, and so on. It also requires the capacity to disrupt and to learn from resistance to disruption.
- This contribution introduces and discusses transgressive learning, disruptive capacity building and pedagogies of resistance, such as learning-based counter-hegemonic responses that can unearth and uproot mechanisms of exploitation, oppression, extractivism, colonisation and marginalisation.
- Transgression, disruption and resistance will inevitably lead to tensions, conflicts, controversy and discomfort, but this is where critical consciousness and spaces for fundamental change can arise.
- More hopeful, energising and regenerative cultures can develop when this disruptive work can be combined with participation in social movements and transition niches that provide concrete utopias and viable alternatives.

Learning from Process Ecology to transform Higher Education in the Anthropocene

Anne Snick and Raad Sharar

- Current crises such as mass species loss, 400 ppm greenhouse gasses in the atmosphere, and the massive disruption of wildlife by human overpopulation are unprecedented in history, making it impossible to learn from the past about how to sustain life in the future.
- Moreover, these disruptions are brought forth by human behaviour, especially the Western model of development that colonialism has imposed worldwide.
- Universities played a crucial role in fuelling this development.
- They emerged in Medieval times, embracing a mechanistic (Newtonian) and separatist (Cartesian) ontology and embedding it in their architecture, separating natural sciences from humanities, ignoring the dynamic interconnection between subsystems, and marginalising holistic types of knowledge.
- Today’s crises are anomalies revealing that this paradigm is maladapted to the autocatalytic, non-linear reality of life on Earth.
- Higher education focuses on transferring discipline-based knowledge, hindering the emergence of more holistic approaches.
- However, HEIs can adapt by learning how to advance a life-supporting, responsible paradigm from natural ecosystems.
- HEIs must become ecosystems for the co-creation of knowledge aligned with life and create open spaces for transdisciplinary learning, including non-academic perspectives and pursuing a vision of a regenerative, decolonised world.
- This can be done rapidly by complementing existing curricula with learner-driven programmes using a complexity-based, transdisciplinary framework.
- Teams of students are currently testing this approach, and the results are promising.
- However, HE policies are needed to allow this transition to scale rapidly.
The contribution of South African higher education institutions to tackling exclusion and sustainability challenges: The Case of University of Johannesburg’s Izindaba Zokudla project in Soweto

Alexis Habiyaremye and Joseph Eliabson Maniragena

- One of the most significant consequences of the Covid-19 pandemic has been the worsening of already high inequality in South Africa through a disproportionate loss of employment among low-wage workers.
- Higher education institutions have the potential to contribute to inclusive transformation as producers of scientific knowledge that can be deployed to help disadvantaged communities solve local development challenges.
- This article uses a case study of a university-community engagement project to explore how South African higher education institutions deployed knowledge exchange projects to build inclusive and sustainable smallholder farming communities.
- Key informant interviews indicate that government support is necessary to scale up basic community capacity to optimise knowledge exchange between the university and disadvantaged communities.
- Incentive structures that reward scientists’ impact on the community more are also more likely to increase community engagement and strengthen local inclusivity and sustainability outcomes.

2.5 ICTs and digitalization.
A digital-human future towards more inclusive and accessible HEIs
Multi-layered digital inequalities in HEIs: the paradox of the post-digital society

Laura Czerniewicz

- This paper explains the ways that digital inequalities are becoming more complex in higher education (HE). It shows that while the foundations of access to devices and connectivity is improving to an extent, the fundamental social inequalities of electricity and affordability are severe. The paper shows how the rapid digitalisation of HE catalysed by the Covid-19 pandemic introduced risks pertaining to student and staff data sovereignty. There is an elaboration on the role of technology in knowledge representation and visibility; the Matthew Effect in educational technology, the biases of algorithms; and the underside of the “any time anywhere” promise.

- In answer to the question “How can HEIs, ICTs and digitalisation address these inequities and contribute to inclusive and accessible HEIs?”, the first answer is that sometimes it can’t, and that technology might be inappropriate or even unethical.

- The argument is made for a serious commitment to a research agenda regarding the ways that HE has been changed by dominant technological systems and discourses.

- There are also opportunities to leverage the gains of designing for equity in practice and in policy.

- And finally, there is room to use the affordances of the technology itself to build completely transformed systems for equitable ends.

Higher education and digitalisation in the pandemic: Latin American lessons for a challenging future

Ana Laura Rivoir

- The situation of the Covid-19 pandemic during 2020 and 2021 has created significant challenges for education in general and higher education in particular.

- Institutions have made a considerable effort to maintain teaching by resorting to online tools.

- In Latin America, they faced problems of infrastructure and connectivity and a lack of digital capabilities and skills, due to conditions in higher education institutions (HEI) and countries.

- The paper presents an overview of the initial conditions of the digitalisation of higher education in Latin America and the existing inequalities.

- The following aspects are analysed using the available data: the changes experienced and the processes associated with emergency distance education, lessons learnt from the introduction of new modes of teaching, and risks associated with fulfilling the right to education and advancing in its democratisation.

- Finally, some recommendations are given for progressing in the transformation of higher education using a blended mode, and some of the actions that are needed in this area.
Technology ecosystems to rethink universities in the digital age

Mercè Gisbert

- The last two decades have been characterised by the widespread integration of technology into education, and universities and higher education have been no exception.
- During this time, the use and application of technology in teaching and management (more than in research) have been approached more from an instrumental perspective.
- Tools and applications have taken centre stage.
- Although most universities around the world have digitalisation plans, virtual campuses and numerous technological tools and resources, evidence of the reality and the pandemic have highlighted the fact that we are still a long way from achieving the digital transformation needed to tackle the challenges we face.
- It is necessary to go a step further by considering higher education institutions as a digital ecosystem from an organisational and strategic point of view.
- The perspective needed to ensure that this ecosystem is balanced involves adopting a shared vision of all areas (management, teaching and research) and all groups (teaching staff, students and administration and services staff), with a clear commitment to integration, equity and sustainability, both institutionally and socially.

2.6 International Higher Education. From competition to collaboration
International Collaboration from an African Perspective: Strengthening Partnerships for our Common Goals

Oluwaseun Tella

• Immediately after Africa’s independence in the 1950s and 1960s, many universities were established alongside the few founded during the colonial era.

• Against the colonial backdrop and with a resolve to safeguard its newfound independence, the continent opted to Africanise its universities rather than implementing strategies of internationalisation and collaboration.

• However, the globalisation of universities exemplified by the world ranking of higher education institutions and the attendant quest for global relevance, among other factors, dictated that Africa would have to abandon this agenda in favour of internationalisation.

• The recent call for decolonisation of African universities ignited by the 2015 student-led protests across South Africa (#FeesMustFall) begs the question of the relevance of African universities to the continent’s developmental goals as its higher education sector wallows in a myriad of challenges such as Eurocentric epistemology, weak digital technology, low research output, poor infrastructure and outdated teaching methods in the era of the fourth industrial revolution and the ongoing COVID-19 pandemic.

The future of international higher education and international academic collaboration: Strengthening partnerships for our common goals

Tessa DeLaquil, Maia Gelashvili, Philip Altbach, Gerardo Blanco, Hans de Wit and Rebecca Schendel

• To address growing global challenges, including economic and geopolitical tensions, racism, nationalism, climate change, and the COVID-19 pandemic, international academic collaboration is more necessary than ever.

• In this report, we predict future international academic collaboration or cooperation dynamics in the global context.

• We describe nine key themes to be taken into account to understand future short- and long-term challenges in international higher education and international academic collaboration: (i) Fundamental global macro-level trends affect international higher education; (ii) International academic collaboration plays a key (though contextualised) role in higher education; (iii) COVID-19 will have a persistent impact on international collaboration; (iv) Physical academic mobility will resume with revised assumptions/rationales; (v) Greater emphasis will be given to locally-based international cooperation; (vi) Virtual collaboration will grow in frequency and importance; (vii) Reduced public funding for international academic collaboration in some contexts will likely exacerbate existing inequalities; (viii) Shifting geopolitical allegiance will affect who is collaborating with whom; (ix) Institutions may increasingly view international academic collaboration in relation to society.

• The paper concludes with a brief discussion of the implications of these trends for the future of international higher education.

150 New Visions for Higher Education towards 2030

Part 2: Transitions: Key Topics, Key Voices

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Promoting Research in Africa Through Higher Education Networks and Alliances

Goolamhussen T. G. Mohamedbhai

- Universities in sub-Saharan Africa were established by colonial powers when the countries were about to achieve independence, mainly to train the workforce necessary to take over state administration after the departure of the colonisers.
- The initial emphasis, therefore, was on undergraduate teaching. Decades later, the need to run postgraduate programmes and undertake relevant research was felt.
- However, universities had little capacity for this. African universities soon realised that their best strategy to achieve their objectives would be to collaborate among themselves, sharing knowledge, experiences and resources.
- This initiated the creation of networks and alliances among African universities, funded by external donors in almost all cases.
- Many very diverse networks have been established, although a great deal of the earlier ones ceased to exist once donor funding stopped. This paper looks at a sample of the higher education networks and alliances currently operating in Africa, highlighting their academic areas of cooperation, mode of operation, governance structure, funders and achievements.
- The paper then identifies some common features of the initiatives and proposes some issues for future consideration.

International collaboration for equity, accountability, innovation and resilience: Universities as hubs for partnerships to address global challenges

Roberta Malee Bassett and Jeremie Amoroso

- The University, one of society’s oldest institutions, is a pillar of local communities, a driver of regional development, and a partner at the forefront of designing solutions to existing global problems.
- The current 2020-30 decade, which began with the most significant global disruptor in nearly a century—the COVID-19 pandemic—will be filled with new challenges as the world aims to build back better—including understanding and expanding upon those crisis interventions which ought to be sustained and strengthened to support stronger, more equitable higher education systems.
- As they have done for centuries, universities will play an active role in contributing to human progress, but this is not an outcome from a single institution.
- Rather, it is the combined effort of partnerships fostered between post-secondary institutions of all types and missions and from across borders and the societies they serve.
- International collaboration in teaching and research allows institutions to strive toward achieving their missions to become more entrepreneurial, and to reap benefits for broader societal impact.
- In this article, different modalities of international collaboration in higher education are explored in the context of their development potential and impact, particularly with regard to adapting internationalisation to be more relevant and equitable in terms of both access and scope for developing countries.
Supporting innovation and change in higher education through leadership and management development

Arnaldo Barone, Leo Goedegebure and William Locke

- Few university leaders and managers have experienced the challenges currently faced in their higher education (HE) work.
- Leading and managing in this environment is likely to require a different mindset and skillset and, in many ways, a different leadership style.
- Therefore, leadership and management development in HE is more important than ever.
- This paper focuses on how to support innovation and change in higher education institutions (HEIs) through leadership and management development.
- It is grounded in research and evidence regarding successful strategies in bringing about transformation, especially in challenging times.
- It starts with a focus on Australia and also draws on expertise from the UK, the US and elsewhere.
- It asks: What is the relationship between leadership, management and performance in HE? Does training in these actually lead to improvement? We find that program effectiveness is related to various design and delivery elements and also the effectiveness of post-training implementation.
- Furthermore, there is a need to differentiate between leader development, which focuses on the level of individual leaders, and leadership development which looks at the development of collective leadership beliefs and practices, in addition to personal development.
Recalibrating the Missions and Roles of Higher Education: A Question of Balance
Norzaini B. Azman

- This paper proposes reforms to higher education, based on the notion of balancing its social and economic values, its role as a public/societal institution with a more robust view of its social contracts, and its goal of promoting social capital/civil society in developing countries.
- The paper summarises the positive and negative impacts of neoliberalism in emerging higher education systems, particularly on accountability and productivity, funding, research and innovation, and working conditions for staff.
- It argues that future higher education reforms should consider its broader role as educational and humanistic institutions, with more egalitarian, collectively owned and participatory democratic approaches.

Enhancing data openness within and beyond academia through quality data management
Mercè Crosas

- Never in history have data been so ubiquitously available to help us infer knowledge, and yet so readily amenable to misinterpretation or confusion.
- High quality, well-described, and traceable data are thus an essential foundation.
- With universities, research centres, industry and government entities generating copious amounts of data, data management must be a core activity and part of their education and training.
- This article discusses what it means to apply good-quality data management and describes the benefits.
- The emphasis is on sharing data with others in such a way that the data can be reused and interpreted correctly and thereby help us validate scientific findings and further build on them.
- The discussion starts with a review of the data lifecycle, the increased use of advanced workflows that help us optimise and replicate the data lifecycle, the implementation of fair (findable, accessible, interoperable, reusable) principles to facilitate data management and data sharing by machines, and finally an exploration of data sharing and open data beyond academia.
Leadership for learning: a case study of powerful professional development for school leaders in Spain

Anna Jolonch, Greg Ross and Núria Vives

- School leadership is a key factor in improving learning in schools, an assertion underpinned by educational research (Day et al., 2016; Leithwood et al., 2009, 2020; Robinson et al., 2008).
- Change within educational institutions requires leadership that puts learning at the centre of all activity and, consequently, educational leaders who are capable of improving the learning of all staff and students (Kools & Stoll, 2016).
- This article describes the training process followed by 200 Spanish educational leaders between 2019 and 2022, within the framework of the Leadership for Learning Programme promoted by the "la Caixa" Foundation and designed by the UCL Institute of Education and Spanish academics.
- It describes the content covered, which is linked to the dimensions that make up the schools-as-learning-organisations model (OECD, 2018), and the educational model, which focuses on reflective practice, peer learning and coaching. In addition, it offers an assessment of the findings of self-perception surveys completed by the participants at the beginning and end of the training process.
- Some of the dimensions in which school leaders themselves reported having seen improvements were the capacity to distribute leadership and encourage collaborative work among teachers and the use of evidence for the design and assessment of teaching and learning processes.
- Finally, it concludes with a series of questions that aim to support the design of processes to promote the professional development of educational leaders, beyond the compulsory education system.
The third and final part of the Higher Education in the World Report 8–Special Issue looks at the debates and realities of HEIs from a regional perspective, exploring the contexts and perspectives of each of the six regions.

The third part seeks to provide a regional approach on the understanding that, even though the contexts and forces may be global, each region has certain patterns that need to be tackled from a regional perspective. Acknowledging that there are global similarities but also different purposes, organisational cultures, goals and strategies, the following questions guide the six regional chapters:

- What do the regions feel higher education institutions should be like in the future?
- What are the similarities? What are the differences?

To this end, several experts from each region have made contributions from their own particular field of research, country or regional expertise. The result is six chapters that reflect the following regions: Middle East and North Africa, North America, Asia and the Pacific, Europe, Africa, and Latin America and the Caribbean.

The perspectives of the contributing authors are unique and uniquely their own, based on their own particular blend of ontological, professional and geographic principles. That said, neither their selection of approaches nor their choice of terminology implies any particular preference or inclination of GUNi in one direction or another.

In this abridged print version of the report, the following pages introduce the experts’ contributions through their respective abstracts. The complete version of their contributions can be found at the report’s website: www.guni-call4action.org.

What makes the report unique is that it will be a living document. Throughout the period 2022-2025, new contributions will be added in the form of papers, videos, interviews and podcasts, giving voice and bearing witness to new ideas, contributions and actions relating to higher education institutions and systems as they move in the direction of Agenda 2030 along the lines marked out by the GUNi vision.

In this respect, it is important to note that the report aims to be a stepping stone in a wider, more ambitious project entitled “GUNi International Call for Action (2022-2025): Rethinking HEIs for Sustainable and Inclusive Societies”. This project will be one of GUNi’s key strategic lines of action for 2022-2025 and will seek to encourage and help HEIs around the world to deploy the actions and changes that are needed to adapt and become more relevant, inclusive, effective, innovative and socially responsible. The overarching aim is for the International Call for Action and the special issue website to become a key open space for contributions to the transformation of HEIs around the world.
3.1 Middle East and North Africa

Higher Education in the Arab World: Challenges and Post Corona Pandemic Prospects

Amr Ezzat Salama

- It is high time to reconsider the future of higher education in the Arab world and worldwide.
- The global pandemic has revealed a reality that needed to be challenged while working on developing methods to overcome its challenges.
- Most of these challenges that go back decades are due to the nature of the emergence and development of Arab higher education institutions, and the shape of the Arab national educational systems.
- We may not be exaggerating to say that higher education (specifically university schooling) is the key to the success of any country economically, socially, scientifically, and even politically.
- Based on this point of view, the countries that have planned for improving their societies economically, socially, scientifically, and even politically, tended to pay special attention to the quality of education in general with focus on higher education in particular.
- Accordingly, governments would allocate suitable proportions among states’ budgets to higher education and scientific research.
- For these reasons, this article approaches the reality of Arab Higher Education through its indicators, exposing its challenges and concluding with a series of recommendations.
Expected Social and Public Role of Higher Education Institutions

Laila El Baradei

- The role of higher education institutions (HEIs) has been redefined in the twenty-first century, with heightened expectations about how they can better serve society.
- More emphasis is given to the quality of the education provided, and more attention is directed to the competencies graduating students acquire, preparing them to serve their nations better.
- Many HEIs in the MENA region remain hampered by challenges, including limited academic freedom, low performance in international rankings, ineffective governance, and a gap between the educational content provided and the needs of the labour market.
- However, the current paper points how HEIs can better serve society and highlights some success stories.
- Amongst the suggested reforms for a more effective social and public role for HEIs in the MENA region are: focusing on the production of relevant, impactful research that benefits society; figuring out creative and effective ways to communicate this research to different stakeholders; intensifying community-based learning and students’ community development activities; building a stronger link between theory and practice in all disciplines; providing non-economically oriented education, and a better match between the curricula taught and market needs.

Integrated Student Development within the Frame of Transformational Learning in the MENA Region - Towards Sustainable and Inclusive Societies

Iman Elkafas

- In a world in constant transformation, the job-for-life career pattern that universities traditionally prepared students for, has been replaced by the need to deal with a highly uncertain labour market.
- This new uncertain, intertwined global world, which faces unprecedented challenges, needs graduates who possess up-to-date knowledge and new skills and competencies that allow them to impact and lead these global changes successfully.
- The author presents a comprehensive model of student learning and development that she has developed and applied, which has proven successful in preparing university students to succeed in the current world.
- The model integrates students’ academic development with multiple aspects of human development, such as emotional, physical, and intellectual.
- The model describes how the different units in a university join forces to develop a well-rounded student.
- This article explains the model in detail, states the requirements for success, and provides the experiences of some students who benefited from the model.
3.2 North America

Remaking American Higher Education: Innovation in a time of disruption

Steven H. Mintz

- Although American colleges and universities receive much more public and private support than their foreign counterparts, enrol a higher proportion of college-age population and attract many more international students, American higher education is beset by pressing challenges, such as affordability, student debt, low levels of degree attainment, high levels of inequality, and questionable student learning and post-graduation employment outcomes.

- These problems have prompted widespread calls for innovation in curriculum design, pedagogy, assessment, delivery modalities, and credentialing.

- This essay will look at the distinctiveness of American higher education, how the post-secondary landscape is shifting, the challenges and forces that are driving calls for innovation, barriers to innovation, and the kinds of innovation that are most likely to gain traction in years to come.
Trends in Canadian higher education institutions: Recognising the importance of community engagement and research for social impact

Joanne Curry and Stephen Dooley

• In a changing and complex world, higher education institutions (HEIs) and funding bodies have identified the benefits of linking students, faculty, and researchers more closely to people, institutions, and enterprises in their communities.
• In addition to building connections, enhancing research relevance, supporting innovation, and raising economic productivity, there is also a moral imperative to engage, especially for public institutions with a social and fiduciary responsibility to help their communities address the accursed problems of our time – from climate change to inequality, from supporting the needs of Black, Indigenous, and People of Colour (BIPOC) to addressing the United Nations Sustainable Development Goals.
• An increasing number of academic institutions have embraced this challenge, and while the road is long, winding, sometimes potholed and forked, research shows the value of engagement often comes not so much from reaching a destination but the process of getting there.
• This paper discusses key ideas and shares good practices regarding community engagement, community partnerships, and community-engaged research in Canada’s higher education sector.
• Using examples from Simon Fraser University (SFU) and other Canadian HEIs and organisations, we identify challenges, opportunities, and strategies to help universities, research funders, and their communities achieve their best results together.

The coming transformation of U.S Higher Education

Arthur Levine

• The United States is hurtling from a national, analogue industrial economy to a global, digital, knowledge economy.
• This is an era of profound, unrelenting and accelerating demographic, economic and technological change, of a magnitude and scope unparalleled since the industrial revolution.
• As was the case then, U.S. higher education will once again be transformed to meet the needs of the emerging society.
• Four changes, none of higher education’s own making, can be highlighted:
  - Institutional control of higher education will decrease, and the power of higher education consumers will increase; new content producers and distributors will enter the higher education marketplace, increasing institutional competition and consumer choice and driving down prices; the industrial era model of higher education, focusing on time, process and teaching will be eclipsed by a knowledge economy successor, rooted in outcomes and learning; and the dominance of degrees and “just-in-case” education will diminish; non-degree certifications and “just-in-time” education will increase in status and value.
  - Every college and university in the nation will be affected by these changes. Some will close, others will adapt to the changes, while the remainder will be disrupted by the changes.
Internationalization and North America’s Competing Priorities

Grace L. Karram Stephenson

- This report on the internationalization of higher education in North America examines global activities and policies related to HEIs in Canada and the United States.
- The region is largely defined by the disparate priorities of players at federal, provincial, institutional and individual level – with international education plans reflecting the distinct priorities of each.
- The recruitment of foreign students is still the dominant government and institutional-level manifestation of internationalisation.
- However, many HEIs are broadening their strategic mandates to prioritise other aspects of internationalisation.
- Over the last decade, global activities have been negatively influenced by polarising political figures who have risen to power in the United States (federally) and Canada (provincially).
- Their influence has altered patterns of student mobility and faculty recruitment. Furthermore, key global crises such as climate change have galvanised academic efforts, creating knowledge diplomacy linkages across the region.
- New forms of research funding are promoting collaboration with non-HE players to improve institutional impact. While institutional and national competition and revenue generation are still driving factors in internationalisation, new initiatives for peace and understanding are emerging as stakeholders begin to prioritise sustainable higher education for the global community.
Towards Societally Embedded Higher Education: A Panoramic Overview of Asia and Oceania

Rajesh Tandon and Niharika Kaul

- The social commitment of higher education has gained much public attention during the pandemic in the Asian region.
- With scientific research under deep public scrutiny, the societal relevance of teaching and research in higher education institutions is now being publicly debated.
- Several strands of this discourse go beyond the traditional service learning or co-creation of knowledge methods.
- Finding contextually relevant knowledge solutions for diverse socio-geographies around the region has been focused upon in community-led actions for adapting to climate impacts, increasing at a phenomenal pace within the region.
- Given the huge diversity of the region, the nature and profile of the higher education system varies greatly. Yet, the pace of enrolments and demand for inclusion of the hitherto excluded has been growing.
- Greater attention is demanded to bring higher education institutions into a life-long learning framework, so that new ways of linking formal learning with life stages of populations can be devised.
- Several such categories comprise the elderly, the migrants, the displaced, and refugees, given their increasing numbers.
- The region is also finding a disconnect between the ‘official’ language of higher education and local languages in communities and regions.
- Implanting European institutional models and languages in higher education on the diverse Asian territory, with a diversity of indigenous communities and languages, is now being challenged through new ways of learning.
- The disruption of face-to-face education due to the pandemic in the region has forced the creative emergence of many hybrid models.
- This paper, therefore, will use illustrations from the higher education system and institutions in the region to demonstrate the directions of the future. Moving towards re-positioning the public purposes of higher education to be more directly embedded in local societies.

The future of International Higher Education in East Asia

Futao Huang

- The purpose of this article is to argue about the future of internationalisation of higher education (IHE) in the principal East and South-East Asian countries.
- The article begins with a brief introduction to the main IHE changes in the principal countries in the region from the late 19th century until the end of the 1980s.
- To continue with the general trends and outcomes of HEi in the principal countries in the region.
- The article concludes by arguing that if these Asian countries aim to achieve a brighter future in IHE, they need to make tremendous efforts to work together to promote national economic prosperity and development, create a stable and peaceful environment in the region, foster academic systems with national distinctiveness, global attraction and competitiveness, make more favourable institutional governance arrangements and establish global centres of learning or excellence.
The future of Higher Education focused on the specific perspective of India
Vidya Yeravdekar

- India has had a rich tradition in learning and education since ancient times.
- From time immemorial, India has always been a centre of learning. The traditional and conventional “Guru” (teacher) - Shishya (student) tradition and the “Guruku-lam” model of imparting education have endorsed India’s contribution to the cause of education.
- Universities like Takshashila (600 BC to 500 AD) and Nalanda (500 to 1300 AD) attracted scholars from the world over to India in pursuit of knowledge.
- The Indian higher education system today is the third-largest in the world with 38.5 million students studying in more than a thousand universities and over 42,000 colleges and 11779 stand-alone institutions.
- The gross enrolment ratio (GER) is 27.1%, which means that 27 out of 100 students in the 18-22 age group are studying in higher education (AISHE Report 2019-20). With the world’s largest higher education system, along with a demographic advantage, India’s focus is to create an education ecosystem which is not just best ‘in’ the world, but best ‘for’ the world.

- The country is now engaged in the use of higher education as a powerful tool to build a knowledge-based information society of the 21st century.
- The Indian education system has already demonstrated its quality by producing some of the best minds to have contributed to the world.
- CEOs of a number of top global companies were educated in India.
- The new education policy announced by the Prime Minister of India on 29 July 2020 has further strengthened the existing education system towards the creation of an education system that will create global citizens with deep-rooted Indian values.

Higher Education in the Asia-Pacific
Yang Rui

- The Asia-Pacific region is attaining a greater global presence. Seen largely as an area of progress and growth, its recent development in higher education has been widely acknowledged.
- This is even more remarkable when compared with other non-Western societies. Modern higher education systems have been well established throughout the region.
- Over the last decades, most states have transformed their higher education systems from elite to mass form.
- With high R&D investment, research has continued to grow rapidly. Asia-Pacific societies now openly aspire to elevate some of their universities to world-class status.

- At the same time, higher education in the region faces a number of challenges.
- As private institutions have become key higher education providers in various societies in the region, one prominent issue is quality.
- Another key priority for most states in the region is to provide equal access to and equity in higher education.
- An additional notable concern is a growing gap between spiralling enrolment and plateauing public finances.
- Tracing the cultural roots of higher education systems in the region, this paper offers a panoramic view of higher education development in the Asia-Pacific region.
Global and Regional Engagement for Sustainable Development: The China Higher Education Case

Roger Y. Chao

- This chapter presents China’s key higher education developments, particularly in its quest for quality, regional and global recognition of Chinese higher education and increasing global and regional influence in higher education.
- Key policies and initiatives, such as the 985, 211 and double world-class university projects, increasing scholarships for Chinese and foreign nationals and establishing university networks, and the belt and road initiative will be presented to highlight China’s global and regional engagement, which contributes to both national and regional sustainable development.
- How Chinese higher education institutions are empowered and utilised to implement national initiatives to address quality higher education, contribute to national development, and China’s international relations policies will also be discussed.
- Furthermore, this chapter argues that path dependency, capacity, and international relations contribute significantly to how a country and its higher education system and institutions engage with the local community, contribute to national sustainable development, and promote a country’s higher education and its graduates beyond national borders.

Riding the Waves of Higher Education Globalisation in Oceania: Responding to Climate Change, the Pandemic and Rising Geopolitical Tensions

Christopher Ziguras

- After the end of the Cold War, universities in Oceania played a pivotal and relatively uncontroversial role in building international linkage for three decades, facilitating transnational flows of knowledge, students and scholars.
- Greater enmeshment in global knowledge production networks was widely seen to generate a wide range of social and economic benefits, albeit unevenly distributed.
- Very quickly, that unquestioned openness to educational globalisation came to be seen as problematic. This chapter provides a brief overview of the key structural features of higher education internationalisation in Oceania before considering a range of global challenges with which universities are now expected to engage.
- The chapter considers separately the quite distinct experiences of high-income Australasia (Australia and New Zealand), as compared with the many South Pacific island states, including Papua New Guinea, Fiji, the Solomon Islands, Vanuatu, New Caledonia and French Polynesia.
- In Australasia, the market-based model has come under increasing political pressure, as the pandemic highlighted just how dependent universities are on international enrolments, and geopolitical tensions led to a defensive strategic lens now being applied to international partnerships.
- In the South Pacific, the call for decolonisation of higher education is increasing scrutiny over how universities engage with global knowledge systems in ways that prioritise local social and economic development.
A European Vision for 2030

Thomas Ekman Jørgensen

- In the spring of 2021, the European University Association (EUA), representing more than 800 members across the continent, published its vision for 2030: "Universities without walls".
- This document lays out the idea of universities that are deeply integrated with the rest of society at the local, national and international levels.

Universities are spaces where diverse learners with different goals are part of the university community - for longer or shorter periods, they will be places of encounters and cooperation with many different partners.

- Sustainable development is and will continue to be a fundamental guiding principle for this societal engagement, focusing on the interplay between the goals of protecting the environment and providing wellbeing across the planet.
- This work will require new levels of cooperation between disciplines within universities as well as with external partners.
- While working with these partners, universities will also stand firm on their values.
- They will be places of academic freedom, with respect for evidence-based debates, and areas of respite to think about new ideas and new perspectives on society and the universe.
- Serendipity and the dedication to knowledge, research and education for their own sake are not in contradiction to providing solutions to societal challenges.
- Looking more concretely at the future and the role that the larger context plays for realising the vision of a university without walls, EUA published a follow-up report on scenarios.

- This report looked at possible developments in geopolitics, digitalisation and the role of democracy in Europe, and how these would affect the ambitions outlined in "Universities without walls".
- These showed that the main risks to realising this vision would be one-dimensional thinking and utilitarianism.
- One-dimensional thinking supposes that universities have one function, being either ivory-tower institutions purely engaged with the production of knowledge for its own sake or cogs in the macro-economic machinery to increase competitiveness.
- Universities are not only producers of knowledge for its own sake and contributors to competitiveness; they are also vehicles for cultural and inter-cultural exchanges, critical debates, social inclusion and much more.
- Moreover, universities can combine all these functions in ways that create new questions and new knowledge.
- Therefore, they should not, as is often the case in geopolitics, become instruments in a struggle between global powers.
- This is also true for learning and teaching, which are much more than tools for providing learners with labour market-relevant skills.
- University values must be protected, for example, from democratic backsliding, but also from being controlled by commercial interests.
- The digital transformation is particularly relevant here, as the pandemic has boosted the digitalisation of universities, which comes with the risk of being dominated by the commercial interests of technology companies.

Interdisciplinary research, multidisciplinary teaching: How universities can contribute to handling the major challenges of the 21st century

Karl Tombré

- The broad transitions of the 21st century are the Environmental and Digital Transformations of our societies and our economy.
- The challenges raised by these transitions are complex, and the associated problems will not be solved by a purely technological approach.
- In this multifaceted world, comprehensive universities have the advantages of a long tradition in applying scientific methods to understand complex questions and gathering all the disciplines associated with human knowledge under the same roof.
- What they still lack to a certain extent is the habit of pushing for extensive interdisciplinary approaches.
- By developing interdisciplinary research programs, fostering cross-disciplinary profiles through an evolution of their curricula, and adding interdisciplinary work to their mobility programs, universities can evolve to be major players for the success of these broad transitions of our world.

Promises and risks of digital research and education

Stephane Berghmans, Jean-Claude Burgelman and Thomas Ekman Jørgensen

- This article explores the consequences of the digitalisation of higher education and research: as research data and data from digitally enhanced learning has grown, so have the possibilities for using this resource for the public good, as well as harvesting it for commercial purposes.
- In this situation, the academic research system must look to preserve its digital sovereignty through the possibility of making research results and data open through Open Science, but must also work to control the data generated by its various activities.
- Large technology companies can and are using this data for commercial services, at times competing with universities, and potentially undermining university values.
- The article argues that we find ourselves at a crucial moment in this development, where universities must act in order to retain control of their activities and avoid dependence on large, commercial stakeholders, while recognising data as a 21st century common good.
Conclusion and outlook: European universities, the green and the digital transition

Thomas Ekman Jørgensen

- European universities are increasingly focused on contributing to sustainable development and, in particular, the green and the digital transition.
- There is a notable change from the earlier paradigm where universities pointed to their contribution to economic growth and competitiveness.
- Now, attention is being focused on the broad scope of their missions and how they provide solutions to the sustainability challenge.
- The green and digital transition are especially pertinent for Europe’s universities.
- These two topics form the red thread of European Union policies, and they are broadly perceived as the main challenges, as is clear from the European contributions to this report.
- This focus is not only about universities as suppliers of societal demands: it also includes the dynamic between universities and their framework conditions.
- These conditions are shaped both by commercial and political stakeholders, and universities shape them in the continuous development of their missions: innovation in learning and teaching – including digitally enhanced learning – interdisciplinarity, international cooperation and Open Science are some examples that have been mentioned in the contributions.
- European university policies have been extraordinarily dynamic in recent years.
- Transnational alliances between universities are deepening, and there is a renewed sense of purpose in the European Union as well as in the Bologna Process.
- The pandemic has also given many European countries an impetus to invest in developing their education and research systems.
- Political initiatives combined with the universities’ awareness of their responsibility in the common challenges could be an accelerator of change for the years to come; this is definitely a space to watch.

3.5 Africa
Presentation of the Regional Chapter on African Higher Education

Ramon Torrent

- The OBREAL Global Association is a member of GUNi that leads the consortium (OBREAL Global, AAU, DAAD, ENQA) implementing the EU-funded project HAQAA-2.
- In this twofold capacity, it has been honoured to coordinate the Africa section of the Special Issue of GUNi’s World Report and write a short presentation that intends to draw a set of clearly perceived needs from the nine contributions to the section, intending to:
  a) Be selective and not to address all issues concerning HE at the regional and continental levels, but focus those that are really relevant for African integration and that are the main challenges faced by HE systems in all countries; b) Correctly articulate the continental and the regional (in plural) levels of integration; c) Be really innovative, not only in terms of R&D&I policies but also in terms of curricula design and implementation following a transformational approach; d) Make the African Standards and Guidelines in Quality Assurance applicable and effective; e) Draw inspiration in all African regions from the best practices on sustainability and internationalisation in some of them.
- The presentation ends by pointing to the essential role associations of African Universities (AAU and the regional ones) can and must play in advancing towards the Africa that Africans want.

Challenges and Perspectives of North African Universities: A Window on African Higher Education

Wail Benjelloun

- North African (NA) Higher Education (HE) includes some of the oldest universities in the world and boasts a prestigious history in both sciences and humanities.
- The colonial interlude introduced new methods of education but left a barren tertiary landscape, and the newly independent countries quickly established national universities that successfully trained their administrative, scientific and technical cadres.
- Today, the NA university system faces other challenges linked to four major factors: massification and sustained educational demand, reform of organisational structure, quality and employability.
- From an employment perspective, NA countries are losing the contribution of more than a third of their human potential in spite of educational expansion, through inappropriate curricula and training and through an inability to incorporate youth into economies that are also growing.
- To remedy the situation, actions such as economic diversification and the introduction of quality labour-intensive value-added economic initiatives should be facilitated, as should the encouragement of entrepreneurship and access to financing for job-creating investments.
- Looking to HE in the African Continent from NA can be of interest because of common historical references, missions and objectives, as well as challenges.
Continental and Regional Integration of Higher Education in Africa: An overview

Juma Shabani

- The process of integrating a higher education system can be seen as a series of activities that contribute to the construction of a higher education area.
- The methodology used to develop the African higher education area is different from that used in Europe, which was supported first by the European Community and then by the Bologna Process.
- In Africa, it will build on the achievements of regional economic communities and will be sustained on three main pillars: (a) the legal framework for mutual recognition of qualifications; (b) the processes of harmonisation, homogenisation and convergence, including Quality Assurance; and (c) the integration and networking of academic and research institutions and infrastructure.

Higher Education in the East African Community

Mike Kuria and Gaspard Banyankimbona

- Higher Education (HE) in East Africa dates to 1949 when Makerere College was renamed Makerere College, University of East Africa.
- Since then, HE in the region has grown to more than 300 universities with over 2 million students today.
- This contribution argues that HE has always played a significant role in the integration of the East African Community (EAC).
- It demonstrates that education continued to unite East Africa even after the collapse of the East African Community in 1977, after only about 10 years of existence, before its revitalisation in 1999.

- The paper traces the evolution of the Inter-University Council for East Africa (IUCEA) from its formation as the Inter-University Committee in 1970 to its current status as EAC’s organ responsible for HE.
- The paper postulates that in the context of the current 6 EAC Partner States, despite the establishment of a regional quality assurance system, there is still a lot of work to be done in terms of harmonisation of education and building a system that allows mutual recognition of qualifications, credit accumulation and transfer, mobility of staff and students, comparability of qualifications, and international recognition.
- It concludes that, nevertheless, the region is moving in the right direction.
Recent developments in Internationalisation in Africa

James Otieno Jowi

- Internationalisation is one of the main phenomena influencing HE transformations and developments globally.
- In recent years, it has grown in importance and has impacted Africa’s HE in a complex way, incentivising change and the strengthening of African Higher Education Institutions (AHEIs) and systems while at the same time compounding some of the challenges they face.
- African universities have thus begun to take stock of what internationalisation portends to them.
- It must never be forgotten that AHEIs engage with internationalisation from a weaker position than their counterparts from the developed countries and thus need to develop new ways of responding to global dynamics.
- Therefore, Africa’s HE must bring a new flavour to the global higher education community to propel stronger developments and engagements with Africa.
- The COVID 19 pandemic presents an important turning point in Africa’s HE and must bring forth new dynamics, especially on the future of internationalisation of HE.
- This contribution presents the state of internationalisation in African HE and highlights some of the challenges, risks and opportunities it offers to AHEIs.
- It briefly explores some contemporary developments in internationalisation in Africa, including the implications of the COVID 19 pandemic.

Transforming Curricula in African Higher Education Institutions: An African necessity

Charmaine B. Villet

- The Higher Education sector on the African continent has seen exceptional growth over the last two decades, although enrolment rates continue to lag behind global figures.
- There are, however, deep concerns over the quality and relevance of the education students receive.
- This contribution defends an urgent focus on developing graduate competencies that will withstand the waves of change and the uncertainty of the global future.
- The curricula of most African universities continue to follow the traditional approach of accumulation of separate courses and credits.
- This approach is no longer able to meet the demands of the global society, which requires graduates to solve complex problems using creative, innovative and ethical thought and practices.
- African Higher Education Institutions should embrace a Transformation philosophy to curriculum thought and practice to attain the “Africa we want”.
- The question “Who will lead Africa into a bright future?” Requires universities to reflect on the challenges facing the continent and define what kind of citizens will be able to handle the challenges most effectively.
- The task of an adequate philosophy of higher education is not only to understand the university or even to defend it but to help change the institution.
Research and innovation: Learning and Innovation strategies for sub-Saharan Africa

Mafini Dosso

- Emerging dynamics and novel actors are shaping the transformations of sub-Saharan Africa’s research and innovation systems.
- In the last decade, new strategies, instruments, alliances and networks have flourished in the region, shining a light on innovative local solutions and tremendous technological potential.
- Long-term policy commitment is critical but not sufficient for their sustainability and for research and innovation to deliver benefits for society.
- Indeed, local actors are confronted with shared regional and global challenges and ecosystem-specific barriers hindering learning, creativity, and innovation processes.
- This contribution addresses the major evolutions in regional learning and innovation strategies and the challenges of their sustainability.

- It calls attention to the new ‘rules of the game’, fast-evolving youth-led digital ecosystems, rising science integration, and best practices cases in science excellence and research and innovation networking.
- Sub-Saharan Africa’s researchers and innovators are thus undoubtedly on the rise.
- However, more inclusive stakeholders’ coalitions, challenges-oriented and place-based strategies would be key for achieving transformations through research and innovation, leaving no one and no place behind.
- Furthermore, monitoring these rapid changes becomes even more pressing in order to ensure that their impacts do not remain uneven and unevenly distributed for the times to come.

Development and Implementation of the ASG-QA in African Higher Education Space: What are the challenges?

Jeffy Mukora

- Quality assurance of African higher education is at the top of the continent’s development agenda.
- Prompted by the imperative to enhance the quality of higher education, the African Union (AU) and the European Union came together to support the Harmonisation of African Higher Education Quality Assurance and Accreditation Initiative (HAQAA) since 2015.
- One of the achievements of the HAQAA Initiative in its first phase is the development of the African Standards and Guidelines for Quality Assurance (ASG-QA) in higher education institutions and quality assurance agencies.
- The ASG-QA is a continental tool that addresses all levels of quality assurance (institutions and regulatory) and their important links.
- The tool is envisaged to engender institutional cultures of quality and enhance the quality of higher education in Africa.
- This contribution reviews the progress made to identify recent developments, challenges still to be faced, and actions required to implement the ASG-QA fully.
New ways to solve the data collection problem in African Higher Education

Kibrome M. Haile

- CESAs (Continental Education Strategy for Africa) 2016-25 represents the commitment of African countries, under the framework of the AU, to transform education and training systems in Africa, considered critical for national development and international outreach.
- For this to be effective, it requires informed data-based policymaking at the various levels of decision-making.
- However, despite efforts at continental and regional levels, data collection and accessibility of timely, relevant, and comparable HE data remains a serious problem in Africa.
- It is necessary now to build upon previous often unsuccessful experiences and look for new ways of addressing the issue.

- This contribution introduces developments towards such an approach, born out of the work of HAQAA 2’s PDU Development Team.
- The approach focuses on data collection in the regions and uses the regions as building blocks for a continental solution.
- It follows consultations with relevant stakeholders in the continent; considers the relatively meaningful progress being made towards HE Integration and data collection in the regions and the need to complement these developments and avoid redundancy; is cognizant of the differences in the level of preparedness and practical necessities of the various regions and is informed by the overall trend of the RI process in Africa.

- The early objectives of higher education in Africa were to provide manpower to serve the civil service of colonial governments.
- This trend continued following the early periods of independent nations in Africa.
- Over the years, the countries have gained independence, but many are still using the colonial curricula to produce their graduates.
- Today, African higher education must change; it must respond to evolving trends and face many challenges: irrelevances of curricula, weak quality assurance mechanisms, poor funding, deteriorating infrastructures, inadequate access despite evident massification in classes, poor teaching methods, which are still teacher-centred, low research and weak innovation.

Conclusion. The Future of Higher Education in Africa. The Association of African Universities (AAU) perspective: a Summary

Olusola Oyewole

- As we move into the future, African higher education will need to take appropriate actions to confront the current challenges.
- The strategies to be adopted must be multifaceted, both at the political and the technical levels.
- The article focuses on the actions need to be worked upon and the role of the Association of African Universities.
- Special attention should be given to youth development in Africa by ensuring that African build up the youths that will drive the development of Africa.
3.6 Latin America and The Caribbean

No region left behind: global responsibility in the face of inequalities. The future of universities in Latin America (an overview)

Axel Didriksson, Damián Del Valle, Daniela Perrotta, Claudio Suasnábar, Célia E. Caregnato, Bernardo S. Miorando, Carmen Caamaño and Andrés Felipe Mora

- The universities of Latin America face a host of pressures, but also a number of new developments.
- The aim of this work is to present the perspective of a group of men and women who make up the core team of the GUNi presidency in Latin America.
- Together, they address current trends both before and during the Covid-19 pandemic across an array of countries.
- Above all, they reflect on a renewed, equitable future of public goods and social justice, laying out strategies and goals to bring about such a future, both at the regional level and in each of the selected countries.
- In this vein, they analyse change processes, look at new institutional components, and examine trends and comparisons.
- As a point of reference, they draw on the Regional Conference on Higher Education (CRES-UNESCO, in its Spanish initials), which was held at the National University of Córdoba in Argentina in 2018.
- The event, which served as a key gathering place for associations, networks, universities, rectors, ministries and governments, now stands as a renewed point of departure for one of the most solid and consolidated intellectual and academic currents in Latin America and the Caribbean.
Universities and the future: a Southern perspective

Freddy Álvarez

- This paper addresses the future of universities from an epistemological standpoint rooted in the Global South.
- To that end, the text is organised in four sections that seek to: 1) describe the transition from a monocultural, western university to an intercultural one;
- 2) lay out the need to create a learning university that can put forward a strong alternative vision to the interference of technology multinationals in education;
- 3) analyse the importance of university for the good life, and 4) emphasise the role of the university in a turbulent world.

Rethinking the university for a new global and local context

Hugo Juri and Manuel Velasco

- In the past two decades, revolutionary events have affected education, including the now ubiquitous presence of smart mobile devices and social media and the emergence of MOOCs.
- These technologies have sparked major transformations alongside other advances in IT, big data, artificial intelligence and machine learning, as well as the neurosciences.
- During the pandemic, all of these changes became normalised around the world and we now face an immediate future of profound social, employment, geopolitical and ethical change.
- Universities must respond to such change quickly.
- We are confronted by the fresh challenges and paradigms of the New Education, which will need to take on the traditional roles of the university and also cope with new actors, new students who have different requirements, such as young people who are native to social media or workers who need to refresh their skills or retrain.
- New tools will also emerge to expand the range of educational opportunities.
- To this end, it is urgent to adapt today’s universities to new models of administration and education that can respond with agility to increasingly faster changes in the local and regional context and to the needs of a society that not only calls on its universities to respond, but also places its trust in them.
- Universities must accept their social commitment with optimism, seriousness, versatility, speed and courage in order to make the necessary changes that society requires of them.
The University and the Challenges of Research and Innovation

Ana Lúcia Gazzola and Jorge Luis Nicolas Audy

- This text addresses the evolution of the Universities’ mission towards incorporating research and its relationship with innovation, as well as the impacts, challenges and opportunities that innovation generates in the academic, social and economic context in today’s society, particularly in Latin America and the Caribbean (LAC).
- The technoscience revolution associated with the emergence of the Knowledge Society has led to a profound change in the role of science and thus that of Universities.
- These institutions have expanded their missions, from teaching to research to extension (understood as social and community responsibility) and innovation, considered as a fourth mission due to its strategic role.
- In recent decades, LAC countries have seen a scenario of research development that has not been reflected, as it should, in innovation and the consequent impact on social and economic development.
- Universities must address this issue urgently, promoting the necessary structural changes to facilitate innovation, protect the interests of researchers and the institution, and mitigate the impasses between legitimate conflicting perspectives.
- It is essential to guarantee respect for foundational institutional values, the focus on the integral education of people, and academic autonomy and freedom.

Edges of the public in higher education and knowledge governance in Latin America

René Ramírez

- Against the background of the centenary of the Argentine university reform of 1918, the present paper updates the debate over restoring public meaning to higher education and knowledge.
- To this end, the paper offers a reflection based on the guidelines set out in the CRES 2018 Declaration, which underscores the importance of reasserting the normative dimension of the governance of knowledge as a common public good, adopting a global perspective.
- This approach serves to compare alternatives in a context marked by the transition toward an increasingly cognitive capitalism in order to grasp the fundamental role played by new areas of knowledge, (re)produced by a system of higher education that can stick to – or perhaps move beyond – the reigning system of accumulation.
Higher Education and South-South (-North) Solidarity Cooperation

Paulo Speller

• In 2010, Brazil was a pioneer in the international integration of universities by bringing together the countries of Latin America and Africa to form the universities of UNILA and UNILAB, which grew out of the multilateral foreign policy of South-South international integration pursued by President Lula (2003-2011), in cooperation with countries of the Global North, specifically the European Union and its Iberian members Portugal and Spain.

• Unlike all other Brazilian public universities, both UNILA and UNILAB have been given formal autonomy to pursue internationalisation.

• Inspired by initiatives and experiences in international higher education in Africa, Asia, and Latin America and the Caribbean, the case of UNILAB is laid out in detail by the author, who was the institution’s first rector up to 2013.

• Putting particular emphasis on the Community of Portuguese Language Countries (CPLP), the paper shows how UNILAB can make headway in the construction of a collaborative model that involves sub-Saharan countries, especially the subregions bordering on or located in the vicinity of Angola, Cape Verde, Equatorial Guinea, Guinea-Bissau, Mozambique, and São Tomé and Príncipe, as well as East Timor at the crossroads of Asia and Oceania.

• UNILAB is making progress toward consolidation.

• Now 25% of its students come from African members of the CPLP and its training and research programmes adopt an intercultural approach that is rooted in the northeast region of Brazil.

• From the outset, UNILAB’s relationship with GUNi has been beneficial for its internationalisation, and even more progress is anticipated with contributions from the World Higher Education Conference in Barcelona in 2022.

Arts and cultures for mainstreaming higher education

Sandra Torlucci

• In recent years there has been a clear repositioning of the arts and artistic production within the academic sphere.

• This movement has spread to the regional and international scenes and is having repercussions in the university system.

• In this context, this article aims to reflect on artistic production as a form of knowledge production.

• The following questions have guided my reflection:

• To what extent does conceiving the arts in terms of research transform the notion of arts, science and technology?

• In what sense is this already thought of, acted, represented, and institutionalised as knowledge that reveals an immanent process in both the arts and science?

• What knowledge is involved?

• How is it linked to the new conditions of contemporary production in the framework of the so-called economies of knowledge, or cognitive capitalism?

• When we speak of artistic research, and not of research about art, we are prompted not only to reflect on the socio-political and economic conditions that enabled this reconfiguration of mutually exclusive semantic fields, but also to be alert to the ideological assumptions that the new connections between art, science and technology impose in the context of current socio-economic configurations.
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New Visions for Higher Education towards 2030

Higher Education in the World (HEIW) is a collective project that has become a benchmark in the higher education sector after seven issues. This series of reports considers the key challenges facing higher education (HE) and its institutions worldwide. This time round, the current context of change calls for a special issue, and the new edition of the Report sets out a broader renewed vision looking towards 2030 and beyond.

The special issue builds on GUNi’s accumulated experience fostering global and regional analyses and producing knowledge for institutional action and public policy-making. Entitled “New Visions for Higher Education towards 2030”, this edition analyses the state of HE in the world and seeks to respond to the need for HEIs to transform themselves in the light of major global changes.

With contributions from over 90 experts from all around the world, this report covers a wide range of topics: from the digital-human future to HEI governance and public service, while also addressing sustainability, labour and citizenship, among other aspects. As a distinctive feature, the report focuses primarily on institutions and introduces regional perspectives, with the aim of ensuring the applicability of the findings. It is hoped that they will be of interest to policymakers and other stakeholders.

Along these lines, this report is conceived as a living document that will evolve over the coming years. All materials are published on a webpage which will be fed with new articles, interviews, videos and podcasts. The report will be a platform for both transformational thinking and action in HEIs.

Moving beyond words, the Report creates a space for active transformation and will constitute the stepping stone for a more ambitious project entitled “GUNi International Call for Action (2022-2025): Rethinking HEIs for Sustainable and Inclusive Societies”. GUNi’s overarching aim is to encourage HEIs around the world to deploy the actions and changes that are needed to adapt and become more relevant, inclusive, sustainable, innovative and socially responsible.

Complete open-content report available at: www.guni-call4action.org