



Conference Proceedings

Regional Center for Educational Planning

2022

Co-designing the Futures of Higher Education

Proceedings from the Regional Center for Educational Planning's 6th International Conference





Co-designing the Futures of Higher Education

Proceedings from the Regional Center for Educational Planning's 6th International Conference



Editors: Susan Kippels and Soha Shami



Held November 16-17, 2022

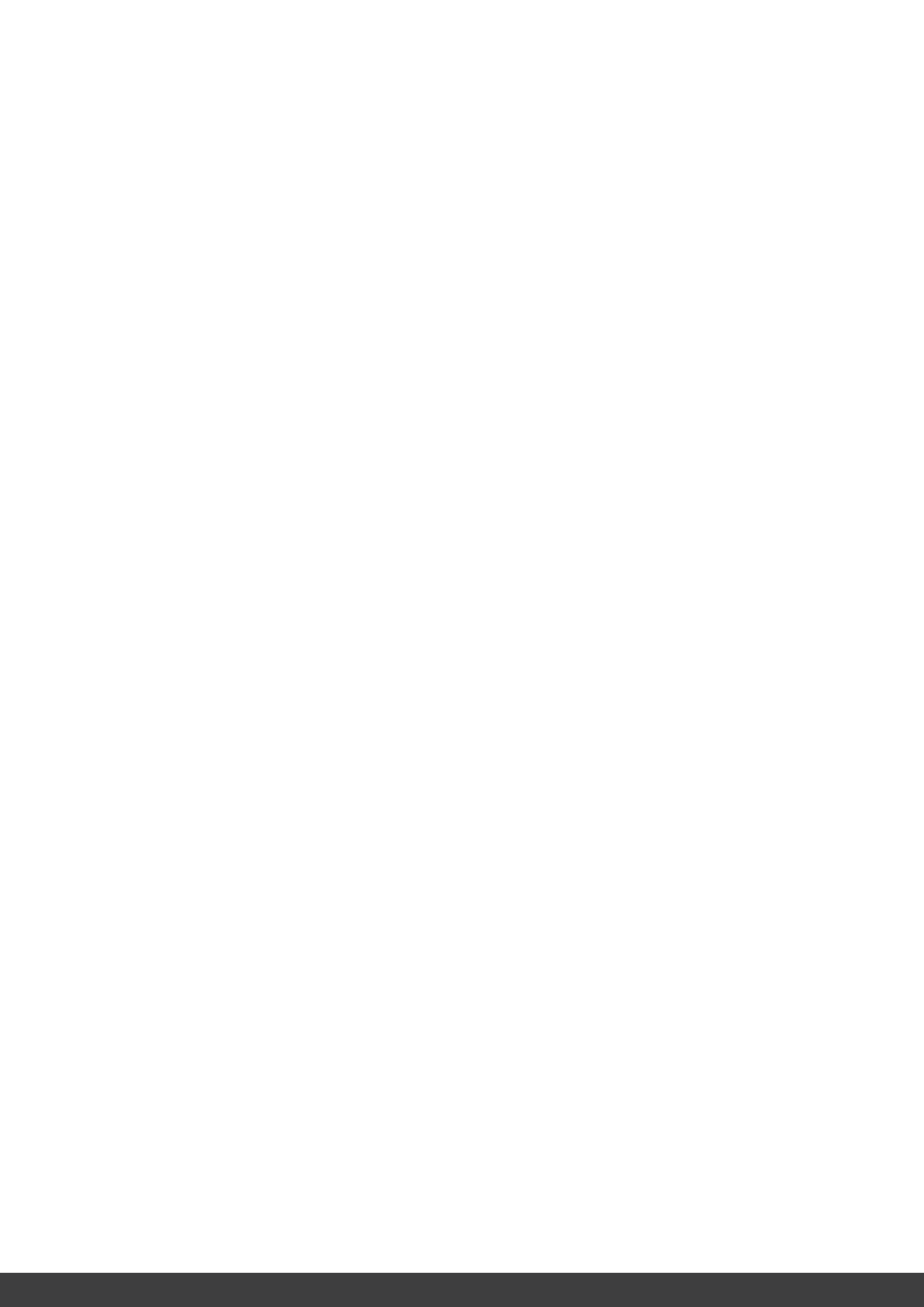


TABLE OF CONTENTS

Disclaimer	7
The Regional Center for Educational Planning.....	8
SDG 4: Planning for Flexible Learning Pathways in Higher Education	9
Introduction	9
Definitions and dimensions of flexible learning pathways.....	11
01. Flexible learning pathways for entering into higher education	13
Alternative admissions pathways	15
02. Flexible learning pathways for progressing through higher education	18
Articulation pathways	21
Flexible delivery modes	22
03. Flexible learning pathways for moving on from higher education and into the labor market	25
Flexible degree structures	26
Continuous education programs.....	27
Conclusion	27
References	29
Future economic and student demographic trends: The implications for the future of higher education in Arab and Gulf Cooperation Council countries	31
Abstract.....	31
Introduction	32
Basic scan of the key trends relevant for higher education policies and strategies.....	32

Strategic priorities to align higher education policies and governance with economic and demographic trends	33
Relevance, quality and attractiveness of higher education study programs	33
Maintain diversity of institutional missions and profiles.....	40
Building city (municipality), regional, and national innovation ecosystems	43
Conclusion	45
References	46
The Role of Higher Education in Bridging Current and Future Skills Gaps.....	48
Abstract.....	48
Introduction: Future Skills in Future Higher Education	48
Methodology of the NextSkills Study	50
Future Skills for future graduates: A comprehensive model of Future Skills.....	51
Future scenarios in higher education.....	58
The role of higher education in promoting Future Skills.....	60
Conclusion	64
References	65
Student-Centered, Student-Ready: The Future of Higher Education.....	66
What does it mean to be student-ready?.....	66
What does it mean to be student-centered?.....	67
The Big Six	70
High Impact Practices.....	74
Preparing for the Challenge: Skills for 21 st -Century Teaching	81
Remember	83
References	84

Exploring Future Directions of the Internationalization of Higher Education: Future-proofing your Internationalization Plans 88

Abstract..... 88

Introduction 88

Why Internationalization? 89

Alternative approaches in internationalization 91

Future directions in internationalization 91

Internationalization at home 92

Digitalization of internationalization 93

Regionalization 94

TNE Partnerships..... 95

Future-proofing internationalization plans 96

References 98

How can Higher Education Institutions Support a Future-Proof Economy?..... 100

Abstract..... 100

A paradigm shift for higher education institutions: new roles and responsibilities 100

VUCA environment and VUCA response..... 102

Universities in the VUCA world 104

From volatility to vision 104

From uncertainty to understanding 105

From complexity to clarity 107

From Ambiguity to Agility 108

Conclusion 109

References 110

Accreditation’s Role in United States Higher Education	113
Abstract.....	113
Accreditation in the U.S.	113
Accreditation as a means for the academy to ensure its own quality.....	114
The recognition of accrediting organizations.....	114
The Council for Higher Education Accreditation.....	114
United States Department of Education	115
The Academy	116
Advocating For and Protecting Features of Higher Education	117
The Impact of CHEA and USDE recognition on student success.....	119
The Triad	120
Challenges for accreditation in the U.S.	120
Academic Freedom.....	120
Cost of higher education	120
Funding for higher education.....	121
Transfer of Credit.....	121
Pressure to regulate.....	121
Diversity, equity, and inclusion.....	121
Conclusion	122
References	123

Disclaimer

This paper was commissioned by the UNESCO Regional Center for Educational Planning (RCEP) in Sharjah, United Arab Emirates. The paper falls under RCEP's second strategic objective, which is to produce and disseminate knowledge in support of education policies to enable planning of educational systems. The views and opinions expressed in this paper are those of the authors and should not be attributed to RCEP.

The Regional Center for Educational Planning

The Regional Center for Educational Planning (RCEP) was established in 2003 under an agreement signed by the Government of the United Arab Emirates (UAE) and the United Nations Educational, Scientific and Cultural Organization (UNESCO). RCEP is a UNESCO Category 2 Center entrusted to build national and regional capacities in the field of educational planning, policies, leadership, and dissemination of related knowledge in Arab and Gulf Cooperation Council countries. RCEP facilitates information-sharing and fosters collaborative initiatives with key national, regional, and international education stakeholders with a view to support Sustainable Development Goal (SDG) 4. The 6th International Conference and its associated proceedings fall under RCEP's second strategic objective, which is to "produce and disseminate knowledge in support of education policies to enable planning of educational systems."

SDG 4: Planning for Flexible Learning Pathways in Higher Education

Michaela Martin, UNESCO International Institute for Educational Planning (IIEP-UNESCO) ¹

Introduction

Higher education systems globally have experienced numerous changes over the past decades, namely an increase in enrollments, diversification of higher education providers and learners, and digitalization of teaching and learning. The unprecedented COVID-19 crisis has accelerated change, and shown the limitations of higher education systems' ability to deal flexibly with transformation. Before discussing the response of higher education systems to these changes, it is important to understand the trends that shaped them.

Over the past few decades, enrollment in higher education has reached unprecedented numbers, amounting to more than 227 million students globally in 2019; by 2040 enrollment is expected to rise to 590 million (Calderon, 2018; UNESCO, 2018; UIS, 2019). Such expansion of demand for higher education has influenced the diversification of providers and modes of delivery. Private, open and distance learning, cross-border, and other types of higher education institutions compete with traditional state-funded institutions for students, staff, and funding.

Diversity in delivery modes has also emerged, with new technologies enabling the offer of online, blended learning and part-time courses and programs. Digital learning plays a crucial role in providing access to higher education for millions of people globally, particularly in the developing world (WENR, 2018). It has been especially beneficial for non-traditional learners, enabling them to learn in formal, non-formal and informal contexts.

Together with the diversity of higher education providers, a more diverse student population has begun to shape education provision. Traditional students now share the lecture halls with adult learners, higher education returnees, people with disabilities, socio-economically disadvantaged students, migrants, indigenous groups, ethnic minorities and other less privileged learners. While the expansion in higher education has benefited some of these groups, higher education mainly benefits the richer segments of the population in countries with high levels of social inequalities. Therefore, the gross enrollment ratio for 18 to 22-year-olds has been increasing among the richest quintile of the population in low- and middle-income countries, where less than one percent of the poorest are enrolled in higher education (Salmi, 2019).

¹ This paper draws broadly from the first chapter of Martin and Furiv's (2022) *Clarifying concepts and dimensions of flexible learning pathways*.

Flexible learning pathways can play a significant role in responding to the above challenges, as they can support learners not only in access and movement through higher education but also in transition to the labor market. Their importance is also acknowledged by the Sustainable Development Goal 4 (SDG4) and the Education Agenda 2030 (or Incheon Declaration), which call for equitable quality education and lifelong learning opportunities for all. To realize SDG4, the Agenda highlights the importance of building higher education systems that provide flexible learning pathways to ensure the development of inclusive and cohesive societies.

Existing research addresses the implementation of flexible learning pathways, but does not provide a comprehensive analysis of policies, instruments and practices that support their implementation for all students, particularly disadvantaged groups. To address this research gap, the UNESCO International Institute for Educational Planning (IIEP-UNESCO) launched an international comparative project in 2018, titled “SDG4: Planning for flexible learning pathways in higher education.”

In the context of this research project, this paper applies a definition of flexible learning pathways used in the Education 2030 Agenda. Flexible learning pathways are understood as “entry points and re-entry points at all ages and all educational levels, strengthened links between formal and non-formal structures, and recognition, validation and accreditation of the knowledge, skills and competencies acquired through non-formal and informal education” (UNESCO, 2015).

The overarching objective of this research project was to generate knowledge and support UNESCO Member States and higher education institutions in developing or strengthening flexible learning pathways in their educational systems. The study applied a three-stage methodology that aimed to explore a variety of approaches to organizing flexible learning pathways in diverse higher education contexts. First, the study comprised a stocktaking exercise to identify promising policy approaches and good practices on flexible learning pathways internationally. Second, a global survey was implemented in all UNESCO Member States to gather evidence on policy and regulatory frameworks, instruments, and practices that support flexible learning pathways. This international survey collected baseline data on a policy phenomenon with little existing research, in particular in the context of developing countries. Third, eight in-depth case studies were carried out in countries that were developing flexible learning pathways or already had strong policies in place. The country case studies focused on understanding the effectiveness of policies at the institutional level. The content of this paper is drawn mainly from the findings of the case studies.

Definitions and dimensions of flexible learning pathways

In IIEP's research, flexible learning pathways are understood as an umbrella concept that implies the availability of multiple well-articulated pathways that serve the needs of diverse students. The term is based on the concept of "flexible learning." Flexible learning is the process of learning that is free from the constraints of time, place, and pace, where a learner can choose the entry and exit points, learning activities, assessment modes and educational resources (Naidu, 2017).

Flexible learning pathways are also closely linked to lifelong learning, which occurs at all ages and in a diverse set of contexts (formal, non-formal, or informal). There is, however, a distinction between flexible learning pathways and lifelong learning. The latter implies continuous learning that does not necessarily lead to a qualification, whereas flexible learning pathway generally support learners to gain a qualification to transition into a higher education institution or directly into the labor market. These terms are closely linked with equity considerations and are well-aligned with the Education 2030 Agenda, which promotes better articulated higher educational systems to improve access and ensure equity for all.

Flexible learning pathways allow for alternative access and mobility of learners between institutions, programs, and levels of study, and towards the labor market. In our research flexible learning pathways are conceptualized according to three dimensions: pathways for entering into, progressing through and moving on from higher education.

Numerous mechanisms exist that can facilitate each of these stages to provide access to higher education and ultimately lead to gaining a qualification and entering into the labor. After analyzing the dimensions of flexible learning pathways in the eight case countries, the research has identified mechanisms that can be grouped under the following categories:

First, pathways for **entering into higher education** generally include facilitating first- and multiple-time entry pathways through:

- Alternative admission policies and practices: preparatory programs, open access, and recognition of prior learning.
- Equitable admission policies and practices: reservation quotas and compensatory scores

Second, **pathways for progressing through higher education include:**

- Articulation or transfer policies: articulation agreements, bridging programs (within and across institutions, programs and courses), and credit accumulation and transfer
- Flexible delivery modes: open and distance learning, flexibility in the pace of study (part-time, evening, holiday season), and flexible curriculum such as across-program or institutional study and choice-based credit systems

Third, **pathways for moving on from higher education** concern completion and transition to the labor market or further study. In the study countries, they are conceptualized under:

- Combining work and study: work-based learning, internships, and apprenticeships
- Flexible degree structures: accelerated degrees, and part-time study
- Continuous learning: open entry courses, and courses for adults and employees

Lastly, academic and career guidance services are essential components that support students during all three stages, namely through: guidance for admissions, introduction and orientation, academic support and tutoring during studies, and career guidance.

The following section will explore how these dimensions of flexible learning pathways are translated into practice in the eight case study countries. Each country is at a different stage in the implementation of flexible learning pathways, hence there are differences in the understanding of these dimensions. These differences will be highlighted as well.

01. Flexible learning pathways for entering into higher education

This section explores flexible learning pathways for getting into higher education through alternative admission policies. Table 1 shows the state of development of flexible learning pathways for getting into higher education in the eight case countries.

Table 1. Flexible learning pathways for getting into higher education


Country	Alternative admission			Equitable admission
	Preparatory programs	Open entry	Recognition of prior learning	Reservation quotas & compensatory scores
Chile	For upper-secondary students to access higher education	Often in vocational training centers	Some institutions have recognition of prior learning for specific programs	Compensatory scores
Finland	For upper-secondary students and immigrants	Through open entry courses ('open studies')	recognition of prior learning for access, defined at the level of HEIs	No data
India	In some higher education institutions	Through open universities	Under development	Reservation quotas in all institutions, mandated by law
Jamaica	In some higher education institutions	No data	recognition of prior learning is used by vocational institutions in the assessment of an applicant for the award of a vocational certification	No data
Malaysia	Pre-university studies	In open universities	Accreditation of prior experiential learning for access or for credit	No data

Country	Alternative admission			Equitable admission
Morocco	No data	In public open-entry universities for baccalaureate holders	Under development	No data
South Africa	Pre-vocational learning programs	No data	Recognition of prior learning for access to learning and advanced standing (joining studies mid-way) and for credit	Compensatory scores
United Kingdom	Foundation year (preparation for higher education)	At the Open University	Access to higher education Diploma, accreditation of prior certificated/ experiential learning	Contextualized requirements for admissions in some higher education

Source. Elaboration by the authors

* This table is non-exhaustive. Further details are given in each country case study

 Full-fledged implementation of the practice at the system level

 Partial or institutional implementation of the practice

 No data, rare implementation, or under development

Each of these dimensions will be explored in more detail in the sub-sections below.

Alternative admissions pathways

Alternative admission ensures access to higher education through pathways that do not adhere to traditional admissions requirements (for example, secondary school leaving certificates or university entrance examinations). Non-traditional students who may not meet the traditional criteria for access (e.g., adult learners, working professionals) can benefit from this pathway (Unger & Zaussinger, 2018). Our research found that alternative admissions in the case study countries occurred as both national and institutional initiatives, facilitated through preparatory programs, open access policies and recognition of prior learning.

Preparatory programs

The case study countries with preparatory programs defined them as flexible access pathways between general or vocational upper secondary level² and higher education (e.g., Finland, South Africa, Jamaica, the United Kingdom). Usually, in these countries, preparatory programs support learners to fulfill general entry requirements for higher education. The programs are focused on providing learners with broader skills and knowledge in the academic setting. Preparatory programs can be organized as introductory or orientation courses (e.g., Finland), or remedial programs (e.g., Chile, South Africa) (see Box 1).

Box 1. Preparatory programs in Chile

In Chile, the Program for Effective Access and Support (PACE) is organized in upper secondary school, jointly with universities, to ensure the transition of students into higher education. High performing students from lower socio-economic background receive workshops and classes (organized on evenings or weekends) in the last two years of upper secondary school to prepare them for access to higher education by emphasizing academic skills needed for students to cope in higher education. Students also receive mentoring and guidance during their first year of university to prevent dropout and support learning outcomes.

Source. Lemaitre et al., 2021

In some of the countries studied, preparatory programs were also understood to be a means of supporting access to higher education for candidates from vocational education and training backgrounds. In this case, preparatory programs support both entry and progression through higher education. Since vocational upper secondary programs mainly provide learners with occupation-related knowledge and skills, learners who wish to transfer to higher education lack necessary skills

² Usually provided in upper secondary schools.

to succeed, and therefore tend to complete undergraduate studies at a lower rate than those with a general upper secondary qualification (Martin & Godonoga, 2020; UNESCO, 2018; OECD, 2014). The emphasis on supporting occupational learners with broader skills to improve transfer between occupational institutions and academic institutions can be found in the United Kingdom as well (see Box 2).

Box 2. Foundation degree in the UK

In the United Kingdom, a foundational degree exists between colleges and universities. The foundational degree has lower entry requirements than a university degree. To complete a degree, students have to spend two years in a college, during which they gain broader academic and vocational skills and knowledge. After completing the degree, students can transfer to a partner university starting from the third year to gain a full bachelor's degree. This pathway supports those candidates who could not meet universities' general entry requirements.

Source. Brennan, 2020

Open entry policy

Open entry is a popular route in six out of eight case study countries (Finland, Chile, Malaysia, India, the United Kingdom, and Morocco). Typically, this pathway does not lead to a formal degree, but can facilitate access of non-traditional and disadvantaged students. Several higher educational institutions have begun offering digital credentials or opportunities (e.g., Finland, India) to recognize a certain share of open entry credits when a student enrolls in a formal degree program.

Open entry policies are frequently implemented through open or dual mode universities offering both face-to-face and distance learning. Open entry options are mostly delivered through open and distance learning program, however, some countries (e.g., Finland, Malaysia) have open entry universities that provide face-to-face courses.

Recognition of prior learning

Open entry is also facilitated through recognition of prior learning in six of the eight case countries and is under development in India and Morocco for the Technical and Vocational Education and Training sector. The UNESCO Institute for Lifelong Learning (UIL) defines recognition of prior learning as a practice that acknowledges different kinds of knowledge and skills obtained in formal, non-formal and informal contexts (UNESCO-UIL, 2012). A few case countries have strong national systems to facilitate the recognition of prior learning (e.g., South Africa, Malaysia), while in others, initiatives tend to be either an institutional responsibility (i.e., Finland) or delegated to external accreditation and validation providers (i.e., the UK).

In most of the case study countries, open entry programs are offered to anyone without an entrance examination; however, Malaysia has created a process called Accreditation of Prior Experiential Learning, through which candidates take an aptitude test and submit a portfolio to have their previous learning assessed and considered for admission to the open entry pathway.

Countries with national systems and procedures for recognizing prior learning are typically supported by national qualifications frameworks, which support learners to seek recognition for their learning if they do not meet formal admission requirements (see Box 3).

Box 3. Recognition of prior learning in South Africa

In South Africa, recognition of prior learning has become a mainstream pathway for access to the post-secondary education and training system. Qualifications and professional designations can be awarded in whole or in part through this mechanism. The qualifications are evaluated against learning outcomes described in the national qualifications framework. Overall, the process includes extensive counseling, preparation for the assessment, moderation and feedback. It is worth noting that implementation of this mechanism differs across institutions. Some common principles applied across most institutions are “deep caring” and “walk-in advice” Potential candidates can receive guidance in their home-language and are able to inquire about the process to gain recognition of skills gained through non-formal or informal learning. The process usually requires candidates to take a placement test or submit a portfolio of evidence.

Source. Bolton, et al., 2020

Research has found, however, that recognition of prior learning is not a mainstream route in most of the case countries, with the exception of South Africa. It is more often practiced by vocational institutions for recognition of labor competencies, rather than academic institutions. This finding was also supported by the international survey administered by IIEP in 2019 which showed that only one third of the 75 responding countries have formally regulated bridging programs, that enable progression from vocational short-cycle programs (ISCED level 5) to academically oriented bachelor’s programs (ISCED level 6) (IIEP-UNESCO, 2019). This clearly indicates a difficulty linking vocational and academic institutions’ qualifications through recognition of prior learning.

02. Flexible learning pathways for progressing through higher education

This section explores flexible learning pathways for progressing through higher education: articulation or transfer policies and flexible education delivery modes. It looks at how the eight case study countries define these, and what commonalities or differences in understanding exist between them. Table 2 presents the state of development of flexible learning pathways for getting through higher education in the study countries.


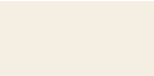
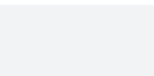
Table 2. Flexible learning pathways for progressing through higher education

Country	Articulation pathways		Flexible delivery modes		
	Transfer programs	Credit accumulation and transfer	Open and distance learning	Flexibility in the pace of study	Flexibility in curriculum
Chile	At the level of higher education institutions	Between the higher education institutions of the Council of University Rectors	Online and blended learning provided at the level of higher education institutions	Part-time study and evening courses	At the level of higher education institutions
Finland	National system of transfer and institutional system	European Credit Transfer System and Diploma Supplement	Online courses and Massive Open Online Courses (MOOCs)	Through open entry courses offered in the daytime, evenings and weekends	higher education institutions have elective courses and specializations, and cross-institutional programs (cross-studies)

Country	Articulation pathways		Flexible delivery modes		
India	On a case-by-case basis	National Academic Credit Bank in the making	Strong emphasis on open and distance learning, including through the SWAYAM platform for MOOCs	Part-time study	The choice-based credit system, Dual degrees and branch transfers in some higher education
Jamaica	Through the 2+2 model	Through the 2+2 model	ND	Part-time study	ND
Malaysia	At the level of higher education institutions, Malaysian Technical University Network programs	80% match is required for the credit transfer to operate	In open-entry universities (credits can be earned through MOOCs)	Part-time and weekend study	At the level of higher education, but little at the national level
Morocco	Rare	In progress	In progress	Part-time study	In a Bachelor's program, with the new reform

Country	Articulation pathways		Flexible delivery modes		
South Africa	Through Credit accumulation and transfer systems	Systemic and specific credit transfer	Higher education institutions can offer online and blended learning	At the level of higher education institutions	For low-achieving students through Extended Curriculum Programs (ECPs)
United Kingdom	Rare	No data	Mostly at the level of higher education institutions, notably with the Open University	Part-time study and block courses	At the level of higher education institutions, degrees with two specializations

Source. Elaboration by the authors

-  Full-fledged implementation of the practice at the system level
-  Partial or institutional implementation of the practice
-  No data, rare implementation, or under development

These dimensions will be explored in the sub-sections below. Definitions and understanding of these terms across the countries will be noted.

Articulation pathways

Articulation pathways are embedded in flexible learning pathways for getting through higher education. Articulation is understood as a process of transfer of learners between programs or disciplines within the same institution or across institutions of the higher education sector. Across the case study countries, the understanding of articulation pathways differs. Articulation can be arranged through national policies or may be the responsibility of higher education institutions. Hence, two types of articulation could be identified in the case countries: systemic and specific or institutional. Systematic articulation applies to all HEIs and means that a formal alignment of learning outcomes and qualifications is supported by the national qualification framework and quality assurance mechanisms. Specific articulation is arranged when two or more institutions have an inter-institutional agreement or a memorandum of understanding, which specifies the conditions of articulation and transfer opportunities.

Transfer programs

Transfer programs in the case countries are understood as a seamless transfer of students between programs, disciplines, and institutions. The study countries, again, have national systems of transfer or transfers based on agreements between higher education institutions and their programs. In Finland, there is a well-developed system for the national transfer of students.

It is important to note that transfer is not a mainstream practice across most case study countries. Transfers between disciplines and programs within the same institution are more common than across different institutions; and transfers between universities and Technical and Vocational Education and Training institutions are the least common. In many countries, there is still a need to ensure linkages between the academic and vocational sub-sectors.

Credit transfers

Credit accumulation and transfer systems (CATS) support recognition and transfer of learning obtained in formal, informal, or non-formal settings (Reilly et al., 2017). In the case study countries, credit transfers are supported by articulation policies, which facilitate student exchanges and support the transfer of students from one program to another, or across institutions. Credit transfer across the study countries takes place at the national or institutional level.

At the national and European levels, Finland applies the European Credit Transfer System to enable student transfer between disciplines and programs. In India, there are discussions around developing

a national academic credit bank where students' data and credits gained can be validated and safely stored. Jamaica also has an interesting policy for the transfer of credits, which supports multiple entries and exits from higher education (see Box 4).

Box 4. Transfer of credits in Jamaica

At the institutional level, Jamaica has an advanced model of credit transfer – the “2+2” model, which allows students to complete the first two years of a bachelor's program within a Community College, after which they are awarded an Associate degree. Students can choose to transfer these credits to continue their degree studies for two more years at the university level to obtain a Bachelor's degree, or transfer to the labor market.

Source. Barrett-Adams & Hayle, 2021

In addition, credit transfers tend to be facilitated only between certain types of institutions. In Chile, transfers take place between prestigious and mostly publicly funded universities through a transferable credit system. These institutional transfer systems are based on inter-institutional agreements. However, credit transfers institutionally can be a challenge due to the lack of trust between institutions at the national level and differences in curricular design.

Flexible delivery modes

Flexibility is the second dimension of flexible learning pathways for progressing through higher education. While there is a great deal of divergence between countries and higher educationals regarding flexibility in their programs, it typically takes the form of:

- Open and distance learning (open studies in Finland, a national platform for MOOCs in India);
- Flexibility in the pace of study (part-time, evening and holiday season programs);
- Flexibility in the curriculum (multi-disciplinary programs, specializations and “cross-studies” in Finland, the Choice Based Credit System in India).

Open and distance learning

Open and distance learning enables flexibility in terms of location of learning and pace (Muyinda, 2012). Open and distance learning aims to expand access to education and enable continuous learning opportunities for diverse types of students, for reskilling or further study. Open universities (usually these are single-mode institutions) generally facilitate open and distance learning programs, but they can also be facilitated by dual-mode institutions that provide face-to-face programs

(Varghese & Püttmann 2011). Across the eight studied countries, most institutions operate programs in dual modes. Malaysia has an interesting open and distance learning framework practiced by its institutions (see Box 5).

Box 5. Open and distance learning programs in Malaysia

Open and distance learning programs were introduced in 2006 as part of the Open Entry policy and practiced mainly by open universities. Regular universities have now begun offering such courses. At Universiti Teknologi MARA, courses are offered in distance mode for one week, this is called “delivery without walls.” During that week students learn in industry or the community. Wawasan Open University offers blended learning, where classes are delivered partly online and partly face-to-face (usually once a month). The university mainly caters to working adults who study to progress in their occupations.

Source. Morshid. et al., 2020

Open and distance learning programs are also offered in other studied countries (e.g., Chile, Finland, Morocco, India). India has an interesting policy framework that has favored the development of open and distance learning programs by open universities, through national platforms for online courses called SWAYAM. The platform aims to provide access to MOOCs and other e-learning content developed by various education providers. An important aspect of MOOCs hosted on the SWAYAM platform is their potential to receive recognition by higher educational institutions. Under current provisions, a student entering a higher education study program in a university can transfer up to 20% of credits from relevant online courses completed on SWAYAM.

Flexibility in the pace of study

Flexibility in the pace of study means that rather than full-day study, students can choose how to combine their studies and work, including through studying part-time, evening, during the weekend, or over the holiday season. In the United Kingdom, part-time provision is well developed throughout the post-secondary sector, with 24% of students studying part-time and completing a bachelor’s degree in four to six years. This flexibility enables students to cover their tuition fees while working. In Chile, 23% of students are enrolled in full-time evening studies, while some 70% are enrolled in a traditional learning mode (daytime and full-time). The former pathway is preferred by adult learners, or learners with caring responsibilities. Flexibility in the pace of study is provided in all eight case countries and understood similarly.

Flexibility in curriculum

Flexibility in the organization of the curriculum can also ensure that learning suits students' needs and particular pathways. It is usually organized at the level of individual institutions via elective courses, cross-institutional/departmental exchanges or joint degrees (e.g., in Finland, India). India is also a good example of a country where flexibility in the curriculum is organized through a national initiative (Box 6).

Box 6. Choice Based Credit System in India

In India, the Choice Based Credit System was introduced in 2015 to promote more interdisciplinary approaches and offer more flexibility in course choices. The University Grants Commission has published guidelines for the implementation of the system in central, state and deemed universities. The system enables students to select from the prescribed list of core, elective, or minor/soft skills courses. Types and sequencing of courses are flexible, making curricula more interdisciplinary.

Source. Malik, G. & Annalakshmi, N. 2020

Modularising study programs can also ensure flexibility by breaking down units of learning (with workload and credits associated) into modules that can be pursued independently from one another. This enables learners to take separate modules at different times and still receive course credit or a degree (see Box 7).

Box 7. The Liberal Arts and Natural Sciences (LANS) degree at Birmingham University

In the United Kingdom, some institutions, like Birmingham University, have introduced great flexibility into the curriculum. In the four-year Bachelor program in Liberal Arts and Natural Sciences, the responsibility of the curriculum content is transferred to the students who can tailor it to their needs and interests by choosing modules across the University, or spending a year abroad, according to their focus area. They also have the opportunity to choose a "learning entrepreneurial skills" option during their last year.

Source. Brennan, 2020

03. Flexible learning pathways for moving on from higher education and into the labor market



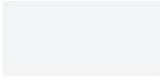
This section explores the dimensions of flexible learning pathways for moving on from higher education towards graduation and transition to the labor market. Table 3 presents the state of development of policies and practices in the eight case countries: flexible degree structures combining work and continuous learning programs. Policies and practices vary across the eight studied countries.

Table 3. Flexible learning pathways for moving on from higher education

Country	Flexible degree structures	Continuous education programs
Chile	Very little and at the level of higher education	At the institution level
Finland	“Studification of work,” internships	At the institution level
India	No data	No data
Jamaica	Part-time degrees, 2+2 model	At the institution level
Malaysia	No data	At the institution level
Morocco	Apprenticeships	At the institution level
South Africa	No data	No data
United Kingdom	Sandwich degree, Accelerated degree	At the institution level

Source. Elaboration by the authors

* This table is non-exhaustive. Further details are given in each country case study

	Full-fledged implementation of the practice at the system level
	Partial/ Institutional implementation of the practice
	No data/rare implementation/under development

Pathways for getting out of higher education tend to be the least developed. Some countries support flexibility in degree structure and organization of studies to enhance graduation and employability, while others focus mainly on providing work-based learning or continuous education programs for working adults.

Flexible degree structures

Flexible degree structures can allow learners to combine study and work. Such pathways mainly cater to non-traditional students, including working adults, part-time students, returnees to higher education, socio-economically disadvantaged students, and migrants. Such pathways are usually created through close collaboration between higher education and businesses (e.g., UK, Finland, Morocco).

Box 8. Four-year bachelor's program in Morocco

One of the aims of the planned four-year Bachelor's degree, which is part of the ongoing Moroccan higher education reform, is to offer programs better aligned with the labor market. The four year Bachelor's degree can be taken on a work-study basis. Graduates will be better prepared to enter the workforce than under the three-year model. Courses and programs will be developed to respond to the increasing need for digitalization of professions and the world of work in general. The new Bachelor's degree also emphasizes courses that will provide students with transversal skills useful for professions of the future.

Source. Kouhlani & Benchekroun, 2020

Combining work and study

Finland is a prime example of a country that has attempted to strengthen the linkage between higher education and the labor market. To improve graduates' employability, Finnish higher education institutions collaborate with the labor market based on the principle of "studification of work, through which all higher education institutions allow learners to combine work and studies. This modality allows students to gain credits towards their degree in working life or through embedded internships and student exchange periods. The "studification of work" has been supported by multiple national projects by the Ministry of Education and Culture, which helped higher education institutions develop internship practices, guidelines, and a work-based pedagogy.

Accelerated degrees

Flexibility in completing degrees is intended to enhance the employability of graduates. In the United Kingdom, there are opportunities to complete degrees in longer or shorter periods, or to combine work and study. Accelerated degrees shorten the time needed to complete a degree. They were recently introduced to allow students to complete a Bachelor's degree in two years instead of three, by devoting more weeks per year to their studies.

Continuous education programs

Continuous education programs also provide flexible opportunities for transitioning to the labor market. In Chile, higher education offer specializations through continuous education programs. These programs are oriented towards working adults who already possess a degree or a title but would like to receive a specialization and develop new competencies required by the labor market.

Conclusion

This paper aimed to detail the varying understandings of flexible learning pathways in eight case study countries. While these countries have policies and practices associated with flexible learning pathways for entering into, progressing through, and moving on from higher education, the flexible learning pathway concept is rarely addressed holistically at the policy level. There are no overarching and unifying policies on flexible learning pathway FLPs at all stages. Instead, there are targeted policies on lifelong learning, recognition of prior learning, CAT, and others. Therefore, the understanding of flexible learning pathways across the countries varies.

The understanding of flexible learning pathways for entering into higher education through open entry policies, alternative admission, and recognition of prior learning is shared among most of the case study countries. Alternative admission is often used to improve accessibility of higher education for non-traditional and disadvantaged learners, as well as for continuous learning, upskilling, or updating of competencies and skills. It is also associated with recognizing the value of knowledge obtained in diverse contexts. Approaches to preparatory programs across the study countries were applied with a similar purpose: to support more students with relevant knowledge and skills to enter higher education. Generally preparatory programs in the case study countries rely on the collaboration between higher education institutions, upper secondary schools, and vocational institutions to ensure linkages between vocational, academic and professional skills, and knowledge and qualifications.

In the eight case study countries, there was a great deal of convergence in how flexible learning pathways were used to support progression through higher education. Some pathways were implemented through national systems, and others were through institutional initiatives. Their implementation was uneven across the countries. For instance, CAT systems were frequently facilitated through national policies (e.g., South Africa, Malaysia, Finland, Jamaica), but transfer programs were often the responsibility of individual or selected higher education institutions operating through inter-institutional agreements. Transfers between institutions and programs

were sometimes introduced to avoid the repetition of learning and to increase student retention. Flexibility in delivery modes was also quite different between institutions. Some provided flexibility in the choice of courses, while others provided an opportunity for specializations and dual degrees. Flexibility in the pace of study (via part-time, evening, or holiday season courses) and provision of open and distance learning are almost universally implemented by higher education in the case study countries.

Understandings of flexible learning pathways for moving on from higher education showed the most divergence across the case study countries, and were less commonly implemented than pathways for access and progression. In the case study countries that have such pathways, they were associated with policy objectives such as enhancing competitiveness of the economy through human resource development, and are mostly facilitated through institutions, although in some countries, there are practices supported by national initiatives. Continuous education programs are most commonly implemented across countries and institutions.

References

1. Barrett-Adams, D. B. & Hayle, C. (2021). *Integrated higher education in support of flexible learning pathways in Jamaica*. Report for the IIEP-UNESCO Research “SDG4: Planning for flexible learning pathways in higher education.” <https://www.ucj.org.jm/wp-content/uploads/2017/07/IIEP-UNESCO-UCL-Jamaica-Integrated-HE-FLP-FINAL-October-20-2021.pdf>
 2. Bolton, H.m Liapeng, M., & Blom, R. (2020). *Flexible learning pathways: The National Qualifications Framework Backbone*. Report for the IIEP-UNESCO research “SDG4: Planning for flexible learning pathways in higher education.” ISBN: 978-1-920649-57-9. <https://www.saqa.org.za/sites/default/files/2020-12/Flexible-Learning-Pathways-in-SA-2020-12.pdf>
 3. Brennan, J. (2020). *Flexible pathways in British higher education: a decentralised and market-based system*. Report for the IIEP-UNESCO Research “SDG4: Planning for flexible learning pathways in higher education.” <https://www.qaa.ac.uk/docs/qaa/about-us/flexible-learning-pathways.pdf>
- Calderon, A.J. (2018). *Massification of Higher Education Revisited*. Melbourne: RMIT.
4. IIEP-UNESCO. (2019). *Achieving SDG4: Flexible Learning Pathways in Higher Education*. Research Findings from the IIEP International Survey. IIEP-UNESCO. https://whec2022.net/resources/IIEP%20FLP%20International%20Survey%20Report_Final_V2.pdf
 5. Kouhlani, B., & Benchekroun M. N. (2020). *Flexibilisation de l’enseignement supérieur au Maroc : Analyse du présent et réflexions pour l’avenir*. Rapport préparé pour le projet de recherche de l’IIPE “ODD4 Planifier les parcours d’apprentissage flexibles.” https://www.cnrst.ma/images/CNRST/PDF/PAF_MAROC_Septembre2021.pdf
 6. Lemaître, M.J.; Ramirez, A.; Baeza, P. & Blanco, C. (2021). *Flexible learning pathways in Chilean higher education – can a bottom-up approach work?* Report for the IIEP-UNESCO Research “SDG4: Planning for flexible learning pathways in higher education.” https://www.cned.cl/sites/default/files/raporte_flp_chile_2021.pdf
 7. Malik, G.; Annalakshmi, N. (2020). *Turning challenges into opportunities: Flexible learning pathways in Indian higher education*. Report for the IIEP-UNESCO research “SDG4: Planning for flexible learning pathways in higher education.” <http://www.niepa.ac.in/Download/Publications/IIEP-UNESCO%20Report%20for%20uploading%20on%20the%20website.pdf>
 8. Martin, M.; Godonoga, A. (2020). *SDG 4 – Policies for Flexible Learning Pathways in Higher Education: Taking stock of good practices internationally*. Working Papers. Paris: IIEP-UNESCO. <https://unesdoc.unesco.org/ark:/48223/pf0000372817>
 9. Morshidi, S. et al. (2020). *Flexible learning pathways in Malaysian higher education: Balancing human resource development and equity policies*. Report for the IIEP-UNESCO Research “SDG4: Planning for flexible learning pathways in higher education.” https://www.ctef.com.my/images/Publications_2020/FLP_2020.pdf

10. Muyinda, P. (2012). Open and distance learning in dual mode universities: A treasure unexploited. *International perspectives of distance learning in higher education*, 33–50. https://cdn.intechopen.com/pdfs/32516/InTech-Open_and_distance_learning_in_dual_mode_universities_a_treasure_unexploited.pdf
11. Naidu, S. (2017). How flexible is flexible learning, who is to decide and what are its implications?. *Distance Education*, 38, pp. 269–272.
12. OECD (Organisation for Economic Co-operation and Development). (2014). *Skills beyond School: Synthesis Report*. OECD Reviews of Vocational Education and Training. Paris: OECD Publishing. <https://www.oecd.org/education/skills-beyond-school/Skills-Beyond-School-Synthesis-Report.pdf>
13. Reilly, M.; Mitchell, T.; Eaton, J. (2017). *Joint Statement on the Transfer and Award of Credit*. : <https://www.chea.org/sites/default/files/other-content/Joint-Statement-Transfer-Award-Credit-2017.pdf>
14. Salmi, J. (2019). All around the world – Higher Education equity policies across the globe. Lumina Foundation. <https://worldaccesshe.com/wp-content/uploads/2018/11/All-around-the-world-Higher-education-equity-policies-across-the-globe-.pdf>
15. UNESCO Institute for Statistics. (2019). *Number of students and enrolment rates by level of education (tertiary level)*. Retrieved from UIS Data: <http://data.uis.unesco.org/>
16. UNESCO-UIL. (2012). *UNESCO guidelines for the recognition, validation and accreditation of the outcomes of non-formal and informal learning*. Hamburg: UNESCO Institute for Lifelong Learning. <https://unesdoc.unesco.org/ark:/48223/pf0000216360>
17. UNESCO. (2015). *Education 2030 Incheon Declaration and Framework for Action for the implementation of Sustainable Development Goal 4*. https://uis.unesco.org/sites/default/files/documents/education-2030-incheon-framework-for-action-implementation-of-sdg4-2016-en_2.pdf
18. UNESCO. (2018). *Pathways of progression*. Linking technical and vocational education and training with postsecondary education. Paris: UNESCO. <https://unesdoc.unesco.org/ark:/48223/pf0000265943>
19. Unger, M.; Zaussinger, S. (2018). *The new student: Flexible learning paths and future learning environments*. Background Paper. Vienna: Institute for Advanced Studies (IHS). https://irihs.ihs.ac.at/id/eprint/4785/1/EU2018_The%20new%20student_Background%20paper.pdf
20. Varghese, N.; Püttmann, V. (2011). *Trends in diversification of post-secondary education*. IIEP Research Papers. Paris: IIEP-UNESCO. <https://www.iiep.unesco.org/en/publication/trends-diversification-post-secondary-education>
21. WENR. (2018, August 14). *Educating the Masses: The Rise of Online Education in Sub-Saharan Africa and South Asia*. <https://wenr.wes.org/2018/08/educating-the-masses-the-rise-of-online-education>

Future economic and student demographic trends: The implications for the future of higher education in Arab and Gulf Cooperation Council countries

Manja Klemenčič, Harvard University (and University of Ljubljana)³

Abstract

The governments of the Gulf Cooperation Council (GCC) countries are pursuing an important strategic agenda of human capital formation. Higher education has a central role to play in these efforts. To devise the appropriate policies and strategies, both governments and higher education institutions must understand the broader economic and demographic trends that influence the higher education sector. This paper presents eight strategic priorities and 20 guidelines to align higher education policies and governance with the most significant economic and demographic trends in GCC countries. Across all eight strategic priorities, there is a common recommendation to build partnerships between higher education institutions and external stakeholders, including enterprises, institutions, and non-profit organizations. These partnerships will support cross-fertilization of ideas and peer learning, pooling of resources and sharing of infrastructure; overall they will drive enhanced excellence, competitiveness, and attractiveness of institutions in the region. Partnerships are also suggested among higher education institutions within cities, regions, and countries, as well as possibly those based in the GCC countries or the Middle East and North Africa (MENA) region more broadly. Importantly, in achieving its core missions, including innovation and entrepreneurship, higher education must not only focus on achieving economic indicators and development, but also on its social impact, particularly societal development and addressing societal challenges. Finally, to build on the impressive intellectual and cultural heritage of this region, higher education must maintain support for rigorous study and research in the humanities.

³ manjaKlemenčič@g.harvard.edu

Introduction

The countries of the GCC⁴ are pursuing an important strategic agenda of human capital formation, defined as “the knowledge, skills, and health that people accumulate over their lives to make them more productive” (World Bank, 2019, p. 37). This agenda is part of the GCC countries’ broader structural reforms aiming to diversify economic sectors, create jobs, and strengthen institutions. The GCC countries rank lower on the World Bank’s Human Capital Index than other countries with comparable levels of income. The World Bank states that “the most pressing challenges slowing human capital formation in the GCC relate to learning outcomes and adult survival rates” (World Bank, 2019, p.8). Human capital formation happens throughout the entire education vertical, with higher education playing a central role in the governments’ efforts to foster it.

To devise appropriate policies and strategies, both governments and higher education institutions need to follow broader economic and demographic trends that have implications on the higher education sector. This paper first discusses the economic and demographic trends most relevant for developing policies and strategies for higher education, then outlines strategic priorities for higher education.

Basic scan of the key trends relevant for higher education policies and strategies

The GCC countries have been experiencing significant population growth , which is expected to continue (Arab Development Portal, n.d.). Population growth has notable implications on demand for education as well as on job creation, social services, urban infrastructure, effective governance, and so forth. The result of population growth in the GCC countries has led to a significant share of the population being between the ages of 15 and 24. According to the Arab Development Portal (n.d.), 27% of the population in this region are youth and adolescents. This demographic situation indicates the rising demand for jobs and potentially higher education.

According to the Arab Development Portal (2020): “the challenges that mark the labor market are in general related to low labor force participation, especially among women, high unemployment rates, especially among youth, large but decreasing shares of public sector employment, and high prevalence of informal employment.” Youth unemployment in the region is significant. The 26% youth unemployment rate is the highest in the world; the rate of unemployment among female youth rises to 39% (Arab Development Portal, n.d.). In general, this region shows lower levels of economically active population than other regions (Arab Development Portal). Another distinct

⁴ Kingdom of Saudi Arabia, Kingdom of Bahrain, State of Kuwait, Sultanate of Oman, State of Qatar, and the United Arab Emirates

characteristic is “a wide mismatch between labor supply and labor demand resulting in high unemployment rates in many countries, especially among youth. This mismatch is largely the result of the structure of the economy in most countries, whereby it is locked into low value-added activities” (Arab Development Portal, 2020).

In the Arab region, 12 million adolescents and youth are out of school, comprising 6% of out-of-school youth and adolescents in the world (Arab Development Portal, year). In 2020, 41.1% of the relevant age group was enrolled in tertiary education. There has not been much improvement since 2015, when the enrollment rate was 40.7% (World Bank, 2017).

Strategic priorities to align higher education policies and governance with economic and demographic trends

In this section, I present three thematic areas with eight strategic priorities and 20 guidelines to align higher education policies and governance with the aforementioned economic and demographic trends in GCC countries. These thematic areas include:

1. Relevance, quality and attractiveness of higher education study programs.
2. Diversity and resilience of higher education institutions.
3. Building city (municipality), regional and national innovation ecosystems.

Relevance, quality and attractiveness of higher education study programs

Youth unemployment, labor skills shortages and skills mismatches have been identified as key challenges in the GCC countries. While higher education alone cannot resolve these challenges, it has a significant role in addressing them. The higher education sector can most effectively contribute to addressing youth unemployment, skills shortages, and skills mismatch when working in close partnership with stakeholders from industry, government, and non-profit sectors. In other words, stakeholders from the sectors that employ graduates from higher education are invaluable partners to higher education institutions working to prepare graduates for the labor market.

Here I offer four propositions (see summary in Table 1). First, deeper and multilayered partnerships will be longer lasting and more effective in enabling higher education institutions to design study programs that are of high quality and relevant to labor market needs. These partnerships can make programs more attractive for home and international students by supporting graduates to find employment, enable high job performance, and secure their wellbeing. Second, inter-institutional partnerships within the country and or the region can facilitate sharing of resources, capacity

building and strengthening of cultural, economic, and political ties. Third, an important aspect of relevant, high quality and attractive study programs is the implementation of student-centered learning and teaching approaches which strengthen student agency. When students become more independent learners they are able to navigate educational opportunities and resources and shape the trajectory of their own learning. Fourth, focusing exclusively on higher education's contribution to economic development overlooks its crucial contribution to societal development, including improving governance, strengthening institutions, driving effective urban development, and supporting innovations in schooling and higher education. Equally important is higher education's role stewarding civilizational advancement, cultural heritage, and the intellectual legacies of the GCC countries and MENA region more broadly. Rigorous scholarship and study of arts and societies is crucial for civilizational advancement and preservation of cultural heritage of the region.

1. Build educational offering in partnership with industry, government, and non-profit sectors to ensure relevance and foster real-world experience and skills matching

This first set of strategic priorities focuses on higher education institutions building partnerships with industry, government and non-profit sectors. This can be achieved, for example, by developing work-based or service-based courses as part of the study programs requirements. Such courses include apprenticeship or traineeship components with the involvement of external stakeholders or with students based at the partner institutions. Such practices are common in study programs like architecture, nursing, and medicine, and should be leveraged more broadly. Another approach is to develop a pool of internships, research collaborations, and innovation labs which connect the educational offering with real-world activities. This allows students to gain work experience or support for their research, innovation or entrepreneurship ideas. Involving external stakeholders as guest lecturers can also facilitate such partnerships.

To address shortages in the active workforce, skills shortages, and skills mismatch, higher education institutions can offer upskilling and reskilling programs with micro-credentials to certify learning outcomes. Such programs integrate lifelong learning into higher education's offerings, enable fast translation of skills needs into learning opportunities, and overall support the preparation of lifelong learners for fast-changing labor markets. Digital skills are particularly suitable for such programs, but upskilling and reskilling programs are relevant for a broad range of needs. Partnership with external stakeholders in developing upskilling and reskilling programs with micro-credentials can help increase the relevance of these programs for the labor market. Quality assurance is as important in these programs as in degree study programs. Micro-credentials could be used to recognize prior learning and work-acquired competences.

In many higher education systems there is a symbolic ranking of professions according to prestige. Medicine, engineering and law tend to be at the top of such hierarchies. Yet, our societies need people educated to be plumbers, nurses, carpenters, electricians, farmers, and construction workers as much as we need people educated to be doctors, lawyers, engineers and academics. These vital professions are an indispensable part of everyday life and ensuring a functioning society and economy. Governments and higher education institutions must invest in study programs that lead to these professions just as they do those deemed more “prestigious”. Efforts are also needed to promote and raise the symbolic value and worth of these professions.

II. Build partnerships across the GCC countries and MENA region for enhanced internationalization

Relevance, quality, and attractiveness of the higher education sector can also come from partnerships between higher education institutions across the GCC countries (and the broader MENA region). Such partnerships can have different levels of intensity, including research collaborations, joint degree programs, staff and student exchanges, and comprehensive bilateral or alliance-based institutional partnerships (Klemenčič 2015, 2017; Hazelkorn & Klemenčič 2022). The benefits of such deepened and expanded internationalization through regional cooperation are manyfold. First, pooling of resources, such as research infrastructure, can increase the competitiveness of these partner institutions, and the country they are based in. Second, internationalization contributes to capacity building through exchange of best practices and peer learning. Finally, it nurtures regional cultural, economic, and political bonds, which are essential for regional trade and politics. Specific measures can include student and staff exchange programs; joint educational offerings, such as joint degree programs; and research collaboration through joint projects, programs and centers.

III. Implement student-centered approaches in learning and teaching to strengthen student agency, foster students' capabilities to be independent learners, enable them to navigate learning and educational opportunities, and support them to take responsibility for their own learning and education pathways

Student-centered learning and teaching (SCLT) are essential for enhancing the relevance, quality, and attractiveness of educational provision, as well as for student outcomes. SCLT improves student outcomes and better prepares graduates for work and life after higher education. SCLT can be understood as an overarching approach to designing higher education processes, which has student agency as its conceptual foundation; SCLT primarily concerns the capability of students to participate, influence, and take responsibility for their learning pathways and environments in order to achieve the expected learning outcomes (Klemenčič et al., 2020). Important to note

here is that SCLT does not only happen in the classroom. A shift to centering students requires the development of a student-centered institutional and national ecosystems (ibid.). SCLT moves beyond the classroom to construct inclusive and supportive learning and teaching environments within higher education institutions, their subunits, and national and regional higher education systems. Such institutional ecosystems include ten mutually reinforcing core elements according to Klemenčič et al 2020:

- Policies, rules and regulations enabling student-centered learning and teaching.
- Student-centered curriculum and pedagogy.
- Student-centered assessment.
- Flexible learning pathways.
- Learner support.
- Teaching support.
- Active learning spaces and academic libraries.
- Learning technologies infrastructure.
- Community learning connections and partnerships.
- Quality assurance supporting student-centered learning and teaching.

Some measures to strengthen student agency and foster student-learning approaches include developing teaching support centers and professional development opportunities for teaching staff to advance their teaching practice. Furthermore, higher education institutions can offer services that help students study and navigate educational opportunities, and build skills to be successful, independent learners, such as effective study skills, self-regulation, time management, and self-direction. All of these help strengthen students' agency as capabilities to navigate and influence learning and educational opportunities and take responsibility over their own learning and education pathways and environments (Klemenčič, 2015; Klemenčič, 2020; Klemenčič & Hoidn, 2020; Hoidn & Klemenčič, 2020; Klemenčič 2023a; Klemenčič 2023b). Inserting flexibility or choice in curricular offerings, such as through elective courses and research topic options all boost student agency and motivation to learn. Flexibility in educational offerings is especially helpful for lifelong learners, including mature students with work and family responsibilities. Approaches may include scaffolding, support, and choice in the how, when, at what pace, what and to what purpose they learn.

In sum, teacher-centered learning and teaching tends to primarily see students as passive recipients of knowledge, while deep learning only happens when students actively participate in the process (Klemenčič et al 2020). Student-centered learning and teaching, on the other hand, set expectations

for students to take responsibility for their learning, enables students to actively participate in the construction of knowledge, and helps develop learner autonomy through self-reflection and learning skills (Klemenčič, 2015; Klemenčič, 2017; Klemenčič, 2018; Klemenčič, 2020; Klemenčič et al., 2020; Hoidn and Klemenčič, 2020).

IV. Nurture the scholarly tradition of approaching the arts and humanities with rigor

Many countries are facing declines in student enrollment in arts and humanities. Some institutions are lowering their standards to attract students to these fields. To maintain national pride in the intellectual and cultural heritage of the GCC countries and broader MENA region, it is imperative to maintain the high standards and academic rigor in the study of arts and humanities. The study of language, literature, history, and other humanities is an important part of education - it encourages students to appreciate the traditions of art, ideas, and values inherent in their cultural heritage. This allows students to think critically and reflectively about their own culture and history, as well as those of others, and the influence these cultures have had on one another and the students' own identities. For higher education, it is not enough to train narrowly focused professionals - engineers, doctors, computer scientists, etc. They too should be well-rounded, with a deep understanding of their cultural and literary heritage. This way higher education institutions are better rooted in the societies that gave them life and purpose, and do not produce a generation of rootless individuals who contribute to the "brain drain" that afflicts many societies in the region.

The GCC region is home to one of the richest intellectual and cultural traditions in world civilization, which for centuries cultivated medicine, astronomy, logic, mathematics, law, and philosophy at the highest level.⁵ Scholars like Ibn Sina, al-Ghazali, Ibn al-Haytham, Ibn al-Shatir and many others have made a crucial mark on the intellectual traditions in world civilization.⁶ The GCC countries and MENA region cannot afford their future economic, political, intellectual and cultural leaders to be unaware and unappreciative of this sophisticated intellectual, cultural and literary heritage.

⁵ For this point, I thank Professor Khaled El-Rouayheb, James Richard Jewett Professor of Islamic Intellectual History and Chair of the Near Eastern Languages and Civilizations Department at Harvard University.

⁶ Ibid.

Table 1: Strategic priorities on relevance, quality and attractiveness of higher education study programs

<i>I. Build educational offering in partnership with industry, government and non-profit sectors to ensure relevance, and foster real-world experience and skills matching</i>		
1.	Develop work-based/service-based courses (apprenticeship, traineeship) and challenge-based courses	Address youth unemployment, skills shortages and skills mismatch
2.	Develop industry, government, and non-profit sector internships, research collaborations, innovation labs, entrepreneurship labs	
3.	Raise prestige of all study programs and professions typically given less symbolic value than these education and train for	
4.	Offer upskilling and reskilling programs with microcredentials in partnership with external stakeholders	
<i>II. Build partnerships across the GCC countries and MENA region for enhanced internationalization</i>		
5.	Facilitate student and staff exchange programs	Facilitate the pooling of resources, capacity building, and deepening of regional cultural, economic, and political bonds
6.	Develop double or joint degree and doctoral programs	
7.	Develop joint research projects, programs, or centers	

III. Implement student-centered approaches in learning and teaching to strengthen student agency, foster student capabilities to be independent learners, enable them to navigate learning and educational opportunities, and support them to take responsibility for their own learning and education pathways

8.	Develop teaching support centers and professional development opportunities for teaching staff	Enhance student learning and increase attractiveness of higher education sector
9.	Offer support to help students study, navigate educational opportunities, and build skills to be successful, independent learners (effective study skills, self-regulation, time management, self-direction, etc.)	
10.	Insert flexibility and choice in curricular offerings, such as optional courses, choice of research topics, to boost students' motivation to learn	
11.	Offer flexibility in degree and non-degree programs for lifelong learners	

IV. Nurture scholarly tradition of rigorous arts and humanities

12.	Maintain high standards and academic rigor in study and scholarship in arts and humanities, and support their continuous intellectual advances build on the rich intellectual traditions of this region	Maintain national pride in the intellectual and cultural heritage of the GCC countries and broader MENA region
-----	---	--

V. Diversity and resilience of higher education institutions

Diversity and resilience of higher education institutions can support the advancing and “future-proofing” of higher education systems. Here I offer two propositions (see summary in Table 2). First, diversity of higher education institutions enables the sector to contribute to a broad variety of national strategic objectives, such as research and innovation, and educated graduates in a broad variety of trades and professions. Furthermore, diverse higher education institutions with diverse institutional missions and profiles cater to different student needs and expectations.

Second, the COVID-19 pandemic was a powerful reminder of the need to build institutional resilience in wake of crises. Institutional resilience is synonymous with the sustainability of institutions, and is an indispensable aspect of development towards excellence in all an institution’s core missions.

Maintain diversity of institutional missions and profiles

Supporting diversity of higher education institutions within each national system should thus be an imperative of governments. Funding regimes as well as national and world rankings can enforce isomorphic tendencies of higher education institutions to copy those perceived to be most successful in pursuing competitive funding or gaining higher position in league tables. Recognizing that “excellence” occurs across all the core missions – learning and teaching, research and innovation, knowledge use and diffusion, engagement and service to society and institutional governance and management helps governments develop policies that support institutional diversity (Hazelkorn and Klemenčič, 2021). Supporting only a few “flagship universities” in a country tends to undermine social and national cohesion, and lower the aggregate societal contributions and attractiveness of the higher education sector as a whole.

One way of supporting “inclusive excellence” across national or regional higher education systems is for governments to promote and incentivize inter-institutional partnerships. The European Union has done this with the European University Initiative (Hazelkorn & Klemenčič, 2022), and in other cases some countries have incentivised institutional mergers. While broad macroeconomic, social and political conditions are difficult to control in raising the attractiveness of study locations, cities and universities can attract foreign students and researchers through collaboration (Klemenčič, 2017). In short, collaboration between universities and cities, along with favorable policy interventions from governments, can resolve the predicaments of peripheral locations with regard to internationalization (Klemenčič 2017). Such partnerships can help build the capacity and attractiveness of the entire higher education sector. Some competition between alliances would inevitably remain to encourage continuous striving for strategic institutional development.

Many authors have argued in favor of an integrated institutional approach (Klemenčič, 2017). As discussed by Klemenčič (2017), the more internationalization is integrated across institutional structures, processes and operations, the more likely synergistic effects of activities and processes will follow. Such synergistic effects are especially called for in peripheral university locations because of the imperatives described above. To achieve this, “internationalization gears” need to be developed as part of the strategy. These have been identified as international profiling, institutional cooperation, mobility and recruitment (Klemenčič, 2015; Klemenčič, 2017). In machines, gears are used for transmitting power from one part of a machine to another. In universities, these internationalization gears create more power within core functions of teaching, research, and third mission. For institutions in peripheral locations, the four gear functions of internationalization are paramount in light of limited resources and international visibility of their locations; yet their development depends greatly on whether institutional climates and higher education system conditions enable and support internationalization (Klemenčič, 2017).

The integrated institutional approach described above using “internationalization gears” should be developed as part of a broader city, regional, and national approach to internationalization to allow for diffusion of ideas and spillover effects (Klemenčič, 2017). The key is for internationalization efforts of each individual societal actor within a given community to be connected to and integrated with others to reinforce their efforts and support those lagging behind. Internationalization practices seen as advantageous for performance may be imitated by others, prompted by competitive pressures or the pursuit of creativity and innovation (Klemenčič, 2017).

VI. Build institutional resilience

Five core measures to build the resilience of higher education institutions should be highlighted. First, higher education institutions need elaborate communication channels to spread timely and effective information, and to enable two-way communication with all members of a higher education institution. Similarly, governments should have elaborate communication channels for timely and effective communication with higher education institutions and other higher education stakeholders within the national systems. Second, sophisticated institutional research, including data collection and analytics practices are essential for institutional strategic development, including fostering institutional learning, and for external reporting and accountability checks (Klemenčič 2016; Klemenčič et al 2015). Third, clear career progression pathways for staff, along with mentoring programs and professional development opportunities are essential for professional advancement and wellbeing, which impacts job performance and retention. In building institutional resilience, it is important to conduct regular institutional research -on workplace climate and the wellbeing of staff and employees. This is to plan interventions as needed and address challenging issues early before they escalate and require more time and effort to resolve.

Table 2: Strategic priorities on diversity and resilience of higher education institutions

V. Maintain diversity of institutional missions and profiles		
13.	Support diversity of institutional mission and profiles and correct for unintended isomorphic effects of funding or ranking regimes	To cater for diverse student and labor market needs and expectations AND enhance attractiveness of higher education sector
14.	Incentivize inter-institutional partnerships	
VI. Build institutional resilience		
15.	Build elaborate communication channels within higher education institutions and the sector at large	Build excellence and support sustainability of higher education institutions
16.	Conduct sophisticated institutional research, including data collection and data analytics to foster institutional strategic development, institutional learning, and external reporting and accountability checks	
17.	Invest in professional development of staff and develop clear career progression pathways; check regularly on workplace climate; and wellbeing of staff and employees	

Source: Prepared by the author

Building city (municipality), regional, and national innovation ecosystems

Like other regions in the world, the GCC countries are subject to global long-term challenges such as climate change, pandemics, loss of biodiversity, aging populations, and increasing poverty and inequalities. Some of these challenges are further magnified in the case of the GCC countries, and some challenges are distinct to this region, like youth unemployment, health, and diversifying industry sectors from over-reliance on oil resources. The GCC countries need to build robust knowledge innovation systems to work on solutions to address these challenges and to drive further economic and societal development, including job creation. The higher education sector has a vital role to play in building innovative ecosystems at the city (or municipality), regional and national level. However, innovation ecosystems per definition consist of multiple actors and strong relationships between these, such as universities and other research and technology organizations, governmental institutions, business enterprises, and non-profits organizations. Innovative ecosystems also require robust infrastructure for research and technology as well as financial and policy considerations. Development of new digital technologies is particularly relevant for all sectors and all types of innovation - product, process, organizational or social.

There are two strategic priorities I wish to highlight here. The first pertains to investment in research on social and economic innovation as well as social and economic entrepreneurship infrastructure. Furthermore, governments and all actors involved need to create enabling conditions, incentives, and appropriately valorize their staff and students' engagement in research, innovation and entrepreneurship. This is to ensure that staff and students are informed about opportunities, have skills and knowledge to take advantage of these opportunities. This is to remove obstacles and raise motivation to engagement. Few staff and students will be motivated if opportunities to engage in innovation through, for example, a university innovation lab is only an add-on activity, not integrated into the university operations and not properly recognized and valorized. Business enterprises, governmental institutions and non-profit organizations also need to create proper mechanisms for informing and incentivizing engagement in innovation activities, especially in cooperation with higher education institutions through aforementioned partnerships. Again, without incentives, such opportunities might appear as additional workload, and staff will not be motivated to join.

Second, as mentioned earlier, digital technologies are becoming an increasingly important part of the infrastructure of basically all sectors of society, including higher education. Digital technologies are an indispensable part of innovation ecosystems and one of major objects of research, innovation, and entrepreneurship. With the increased use of digital technologies, it is necessary to develop appropriate governance arrangements to ensure digital trust(worthiness) of digital technologies,

digital services, and the organizations that provide them. Concretely, this means that it is necessary to develop rules, guidelines, and governance structures on cybersecurity, privacy, interoperability, transparency, and fairness. This is to ensure the inclusive, ethical, and responsible use of digital technology and services (and digital data), as well as the ethical conduct of digital technology providers and users. In this way, digital (education) technology can support the advancement and excellence of higher education in an ethical, inclusive and responsible way.

Table 3: Strategic priorities on building city (municipality), regional and national innovation ecosystems

VII. Invest in research, (social) innovation and (social) entrepreneurship		
18.	Invest in research, (social) innovation and (social) entrepreneurship infrastructure; create enabling conditions, incentivize and valorize staff and student engagement in research, innovation and entrepreneurship	For higher education to contribute impactfully and meaningfully to individuals' advancement and wellbeing, and cities'(municipalities'), regions', and countries' societal and economic goals
19.	Build sustainable and mutually beneficial cooperation models with different stakeholders in local, regional, and national ecosystems	
VIII. Develop governance of digital technology in higher education to build digital trust(worthiness)		
20.	Develop rules, guidelines, and governance structures on cybersecurity, privacy, interoperability, transparency, and fairness for inclusive, ethical and responsible use of digital technology and services in higher education, and the ethical conduct of digital technology providers and users	For digital (education) technology to support the advancement and excellence of higher education in an ethical, inclusive and responsible way

Source: Prepared by the author

Conclusion

This paper presents eight strategic priorities and 20 guidelines for higher education in the GCC countries on:

- Micro level in respect to the relevance, quality and attractiveness of higher education study programs.
- Meso level in respect to the diversity and resilience of higher education institutions.
- Macro level in respect to building city (municipalities), regional and national innovation ecosystems.

These strategic priorities have been chosen to align higher education policies and governance with the most significant economic and demographic trends in the GCC countries.

Across all strategic priorities, the meta recommendation arises to build partnerships between higher education institutions and external stakeholders from business enterprises, governmental institutions and non-profit organizations. This is to achieve cross-fertilization of ideas and peer learning, pooling of resources, and sharing of infrastructure, and can drive enhanced excellence, competitiveness, and attractiveness of institutions in the region. For the same purpose, partnerships are also suggested among higher education institutions within cities, regions, countries, as well as potentially higher education institutions based in other GCC countries or throughout the MENA region. These partnerships are key to higher education addressing the challenges common to the GCC countries and the world more broadly, as well as to drive societal and economic development and support the resilience and wellbeing of citizens. Importantly, the focus of higher education and its core missions, including innovation and entrepreneurship, must not be only on economic indicators and development, but also on higher education institutions' social impact - its contribution to societal development and the addressing of societal challenges (Nuno, Teixeira, & Klemenčič, 2021). Finally, higher education must maintain support of rigorous study and research in the humanities, which are key to maintaining the impressive intellectual and cultural heritage of the region.

References

1. Arab Development Portal. (n.d.). *Demography*. <https://data.arabdevelopmentportal.com/topics/Demography-1/International/Annual/>
2. Arab Development Portal. (2020). *Labor and Employment* <https://www.arabdevelopmentportal.com/indicator/labor-and-employment>
3. Hazelkorn, E. & Klemenčič, M. (2022). Strategy seeks “inclusive excellence” for European HE, University World News, 20 January 2022 <https://www.universityworldnews.com/post.php?story=20220120133817396>
4. Klemenčič, M. & Hoidn, S. (2020). Beyond Student-Centered Classrooms: A Comprehensive Approach to Student-Centered Learning and Teaching Through Student-Centered Ecosystems Framework. In S. Hoidn & M. Klemenčič (Eds.) *Routledge International Handbook on Student-Centered Learning and Teaching in Higher Education* (Routledge).
5. Klemenčič, M. (2015). What is student agency? An ontological exploration in the context of research on student engagement. In M Klemenčič, S. Bergan, & R. Primožič (Eds.) *Student engagement in Europe: society, higher education, and student governance*. Council of Europe Higher Education Series No. 20. Strasbourg: Council of Europe Publishing.
6. Klemenčič, M. (2015). Internationalization of higher education in peripheries. In E. Beerkens, M. Magnan, S. Söderqvist, M. & H.-G. van Liempd (Eds.) *Handbook on Internationalization of Higher Education*. Berlin: RAABE Verlag (A 2.1-11, Supp. 22, III-2015).
7. Klemenčič, M. (2016). The role of Institutional Research Positioning in Universities: Practices in Central and Eastern European countries. In Prichard, R., Taylor, J. & Pausits, A. (Eds.) *Positioning universities*, pp. 3-18 (Rotterdam: Sense Publishers).
8. Klemenčič, M. (2017). Internationalization of Higher Education in the Peripheries: The “gear effect” of integrated international engagements. In H. de Wit, J. Gacel-Ávila, E. Jones, & N. Jooste (Eds.) *The Globalization of Internationalization: Emerging Voices and perspectives* (Chapter 9, pp. 99-109). London: Routledge.
9. Klemenčič, M. (2020) Students as Actors and Agents in Student-Centered Higher Education. In S. Hoidn and M. Klemenčič (Eds.) *Routledge International Handbook on Student-Centered Learning and Teaching in Higher Education* (Routledge).
10. Klemenčič, M. (2023a). A Theory of Student Agency in Higher Education. In C. Baik & E. Kahu (Eds.) *Research Handbook on Student Experiences in Higher Education*. Klemenčič, M. (2023b). Student agency and student impact through representative student associations. In *Bloomsbury Handbook on Student Voice in Higher Education*.

11. Klemenčič, M., Pupinis M., & Kirdulytė, G. (2020). *Mapping and analysis of student-centered learning and teaching practices: Usable knowledge to support a more inclusive high-quality higher education*. Luxembourg: Publications Office of the European Union.
12. Klemenčič, M., Šćukanec, N., & Komljenovič, J. (2015). Decision Support Issues in Central and Eastern Europe. In K. Webber and A. Calderon (Eds.) *Institutional Research and Planning in Higher Education in a Global Context* (pp. 71-85). Routledge Press/Taylor & Francis.
13. Nuno Teixeira P. & Klemenčič M. (2021) Valuing the Civic Role of University Education in an Age of Competition and Rapid Change. In H. van't Land, A. Corcoran, DC Iancu (Eds.) *The Promise of Higher Education* (pp. 145-151). Springer, Cham. https://doi.org/10.1007/978-3-030-67245-4_23.
14. World Bank. (2017). World Development Indicators. <http://wdi.worldbank.org/table/2.8>

The Role of Higher Education in Bridging Current and Future Skills Gaps

Ulf-Daniel Ehlers & Laura Eigbrecht, DHBW Karlsruhe⁷

Abstract

In a rapidly changing world, discussions related to Future Skills are some of the most important in educational research, and have been for some time. Future Skills discussions initially focused on graduate attributes; the topic is often intangible due to conceptual complexity about how to define skills and competencies. Future Skills are often only referred to in a limited focus on digital skills. The research presented here is based on an empirical, multi-method approach conducted by NextSkills studies.

The intention of the project is to explore the demand for specific Future Skills in more detail and then, in a second step, to substantiate them in terms of educational theory. These Future Skills are classified by the “Future Skills Triple Helix-Model of Capacity to Act in Emergent Practical Contexts“. More specifically, these are skills such as ambiguity competence, ethical competence, self-competence, and others. Moreover, four developmental strands that will strongly influence the future development of higher education institutions are identified: Future Skills focus, Multi-institutional Study Pathways, Personalization of Academic Learning, and Lifelong Learning in Higher Education. Higher education will play an important role in helping to make our societies resilient and future-proof, but new, proven structures and models are required for higher education moving forward. Higher education institutions need to become more reflective and future-thinking.

Introduction: Future Skills in Future Higher Education

The following text fragment was generated based on the query “*write an introduction on the subject of the role of higher education in bridging current and future skills gaps*“:

Higher education plays a critical role in bridging the gap between current and future skills. With the rapid pace of technological advancement and the changing demands of the job market, it is essential for individuals to continuously acquire new skills and knowledge in order to remain competitive in their careers. Higher education institutions, such as universities and colleges, provide individuals with the opportunity to do so through a variety of academic programs and professional development opportunities. These

⁷ ulf-daniel.ehlers@dhbw-karlsruhe.de, laura.eigbrecht@dhbw-karlsruhe.de

programs are designed to help individuals acquire the skills and knowledge they need to succeed in their current jobs and to prepare them for future careers. By providing access to a diverse range of academic programs and experiential learning opportunities, higher education institutions help individuals to stay up-to-date with the latest developments in their field and to gain the skills and knowledge needed to adapt to changing job markets. In this way, higher education plays a vital role in bridging the gap between current and future skills, helping individuals to thrive in an increasingly competitive and dynamic job market. (Open AI, 2022)”.

This introduction was written by ChatGPT, a chatbot by OpenAI based on Artificial Intelligence (AI). In a time where AI can produce meaningful texts, generate entire student essays, and synthesize knowledge, – the role of higher education needs to be clearer than ever. Ultimately, given a rapidly changing world, higher education must take its responsibility to prepare graduates for emerging futures in an uncertain world.

Future Skills are more indispensable than ever, and it is critical to ensure their development within higher education learning experiences. In our research, we define Future Skills as competences that enable individuals to solve complex problems in a self-organized manner and to act successfully in highly emergent contexts. Future Skills are based on cognitive, motivational, volitional, and social resources; in addition, they are value-based and can be acquired through a learning process (Ehlers, 2020, p. 53). In the public discussion on higher education concepts, Future Skills have contributed to a shift, which we refer to here as the Future Skills Turn (Ehlers, 2020, 2022c). Future Skills has gained enormous influence, not so much as a tailored and empirically operationalized concept, but rather as a conceptual condensation of broadly diversified bundles of arguments and objectives (Ehlers, 2020; 2022a; Placke & Schleiermacher, 2018).

Future Skills first gained attention given the diagnosis that higher education presently does not confront the pressing challenges of our societies in a way that is fit to purpose for future social or economic challenges (Hippler, 2016; Kummert, 2017). Global challenges are exacerbated by a constantly accelerating globalization process and ever faster digital progress. This digital acceleration is characterized by persistent uncertainty, which makes constant creative responsibility a necessity (Ehlers, 2020). It is our responsibility to make the best of the possibilities and find ways to deal with this uncertain future. This is about nothing more and nothing less than the preservation of our planet and our livelihoods.

The institution of higher education is faced with the challenge of reinventing itself at a time when it is undergoing an enormous growth process. 70 percent of one age cohort or more is predicted to undertake higher education worldwide by the year 2050 (Ehlers, 2020). Higher education institutions must address the question of what Future Skills the graduates of tomorrow will need and how they can support them in acquiring them. To do this, it is first necessary to describe these Future Skills in terms of educational theory; this can be done using the Future Skills Triple Helix Model, which was developed within the framework of the Next Skills Studies (Ehlers, 2020). This paper presents research evidence on Future Skills that matter for higher education students and introduces 17 Skills Profiles for the future. It then discusses higher education's role in promoting these skills profiles. It aims to inspire education experts worldwide to reflect on their personal and institutional roles in preparing learners for today and tomorrow's challenges.

Methodology of the NextSkills Study

The NextSkills study used a multilevel and multi-method research design, including desk research, document analysis, expert evaluations, semi-structured qualitative interviews, and Delphi surveys. The aim was to create an inventory of skill needs for the future and analyze and cluster them to create future skill profiles. A second research phase was used to identify existing theories that complement the skills inventory. The study was conducted as follows:

1. Identification of Future Organizations – June 2015: Desk research was conducted to identify organizations with experience in implementing competence models and designing future work contexts. From the initial list of 140 organizations, a jury panel of nearly 50 experts analyzed and narrowed the list to 20 organizations for the next step of the study.

2. Interview Study – December 2016 to December 2017: Interviews were conducted with HR managers of the selected organizations and, in some cases, students who studied there as part of (dual) degree programs. The interviews used guiding questions and were open-ended, semi-structured, and problem-focused. Constructs were extracted from the interview data to reconstruct contexts, values, processes, and dependencies for competences considered important for individuals in the future.

3. International Delphi Study – September to October 2018: In order to further refine and validate the qualitative results, a Delphi study was conducted with an international panel of experts. The Delphi study, entitled "Future Skills – Future Learning and Future Higher Education," included two rounds of interviews. Fifty-three international experts from different organizations and institutions were invited to participate in the study.

4. Analysis of existing Future Skills approaches – End of 2021: After a screening of international and German-language Future Skills studies published over the last five years, German-language research was analyzed to identify skills profiles and transfer them into a Future Skills framework.

5. Expansion of the analysis to include the media skills model – 2022: Future Skills studies published in the German-speaking world in the last five years were analyzed using Baacke's media skills model to describe the extent to which Future Skills approaches include digital skills or go beyond them.

Future Skills for future graduates: A comprehensive model of Future Skills

Future Skills are competencies of a specific nature (Agentur, 2021; Ehlers, 2020). For example, if the task is to develop a solution to a new problem, the ability to change perspectives, flexibility, openness, and interdisciplinarity are important. In the NextSkills study, these competencies are summarized in a "Future Skills" profile with the label "design-thinking competence" (Ehlers, 2022a; 2022b). If, for example, another area involves finding one's way professionally in roles that are increasingly networked, unclear, and complex, skills such as dealing with ambiguity, acting in uncertain situations, and dealing with heterogeneity are important. All these skills are summarized in the NextSkills study as a "Future Skills" profile under the label "ambiguity competence." The NextSkills study contains 17 such Future Skills profiles (Ehlers, 2022a; 2022b). While this definition of Future Skills is valid for all individuals, other definitions focus on "working lives in the next five years" (Agentur, 2021), or stress that Future Skills should be conceived "to navigate towards the future we want, individually and collectively" (OECD, 2019).

Since 2017, when the first explicit Future Skills study was published in Germany, the interest in Future Skills for the field of academic education has multiplied; it has influenced discussions about key competencies and other related concepts, such as 21st-century Skills, Graduate Attributes, and soft skills. There are many reasons for this shift, which lie in societal megatrends such as digitalization, demographic change, and the development of an educational society (Ehlers, 2020). These megatrends lead to an increasing importance of Future Skills as precisely those abilities that allow individuals to possess or regain the ability to shape their own lives and social contexts in a world of constant change and in future emergent and rapidly changing situations.

Future Skills are therefore competencies of particular importance for the ability to act in future situations that repeatedly produce new, complex problem situations for which preparation through education in knowledge transfer is no longer feasible. The concept of emergence serves as




a differentiating dimension between Future Skills and current or previous competencies required; in other words, contexts that exhibit highly emergent developments, require Future Skills. Emergence is thus the dividing line between traditional and future areas of work. This boundary is not clearly defined, but fluid in nature. Given that many organizations are moving from mildly to highly emergent work contexts, the need for Future Skills is also an evolving domain.





While numerous publications on Future Skills list skills profiles, they have theoretical shortcomings (Ehlers, 2022b). For example, they are often not based on clearly defined Future Skills conceptions, are not well-founded in educational and competence theory, or argue from a purely employability-oriented perspective. On the other hand, the Future Skills framework presented here is anchored in educational and competence theory and empirically based. We conceptualize Future Skills as competencies and thus complex constructs that are based on cognitive, motivational, volitional, and social resources, intended to enable successful action in emergent contexts.





Based on in-depth interviews and the assessment of a global expert survey, 17 Future Skills profiles were constructed that are of particular importance for future university graduates (see Table 1 for a shortened description and reference competencies; the complete descriptions can be found in (Ehlers, 2020)). Each profile consists of a bundle of reference competencies. The various Future Skills profiles can be assigned to three dimensions: individual development-related, solution or object-related, and organization or social system-related.




The Future Skills Turn (Ehlers, 2022c) is already taking place and is necessary for the universities of the future. Here, the focus is no longer on the function of knowledge transfer – instead, students should be supported in developing dispositions for action in dealing with complex, unknown problem situations through reflection, values, and attitudes.




Table 1: Future Skills Profiles in an Overview

Future Skills Profiles	Reference competencies	Short description
Learning – Subject development-related competencies		
<p>Learning literacy</p> 	<ul style="list-style-type: none"> • Self-directed learning • Metacognitive skills 	<p>Learning literacy is the ability and willingness to learn in a self-directed and self-initiated fashion. It also entails metacognitive skills.</p>
<p>Self-efficacy</p> 	<ul style="list-style-type: none"> • Self-confidence 	<p>Self-efficacy as a Future Skills Profile refers to the belief and confidence in one's own ability to master the task at hand, relying on one's own abilities and taking responsibility for one's decisions.</p>
<p>Self-determination</p> 	<ul style="list-style-type: none"> • Autonomy 	<p>Self-determination describes an individual's ability to act productively within the field of tension between external structure and self-organization, and to create room for self-development and autonomy, so that the individual can meet their own needs in freedom and self-organization.</p>

<p>Self-competence</p> 	<ul style="list-style-type: none"> • Self-management • Self-organization competence • Self-regulation • Cognitive load management • Self-responsibility 	<p>Self-competence as a Future Skill is the ability to develop one’s own personal and professional capabilities largely independent of external influences. This includes other skills such as self-motivation and planning, but also goal-setting, time management, organization, learning aptitude, controlling success through feedback, cognitive load management and a high degree of personal responsibility.</p>
<p>Reflective competence</p> 	<ul style="list-style-type: none"> • Critical thinking • Self-reflection competence 	<p>Reflective competence includes the willingness and ability to reflect by constructively questioning oneself and others for , and holistically assess underlying behaviors, thoughts, and values.</p>
<p>Decision competence</p> 	<ul style="list-style-type: none"> • Responsibility-taking 	<p>Decision competence is the ability to analyze decisions and evaluate different alternatives, as well as making a final decision and taking responsibility for it.</p>
<p>Initiative and performance competence</p> 	<ul style="list-style-type: none"> • (Intrinsic) motivation • Self-motivation • Motivation capability • Initiative-taking • Need/motivation for achievement • Engagement • Persistence • Goal-orientation 	<p>Initiative and performance competence refers to an individual’s ability to motivate themselves, and their desire to achieve. Persistence and goal-orientation form the motivational basis for performance. A positive self-concept also plays an important role, as it serves to attribute success and failure in such a way that the individual’s motivation to perform does not decrease.</p>

<p>Ambiguity competence</p> 	<ul style="list-style-type: none"> • Dealing with uncertainty • Dealing with heterogeneity • Ability to act in different roles 	<p>Ambiguity competence refers to an individual's ability to recognize, understand, and productively handle ambiguity, heterogeneity, and uncertainty, as well as to act in different roles.</p>
<p>Ethical competence</p> 		<p>Ethical competence comprises the ability to identify whether a situation is ethical through a process of perception of conceptual, empirical and contextual considerations, evaluation of the relevance, weight, justification, binding nature, and conditions of application of prescriptive premises, and the ability to form judgements and check their logical consistency, their conditions of use and their alternatives.</p>
<p>Development – Object-related competences</p>		
<p>Design-thinking competence</p> 	<ul style="list-style-type: none"> • Flexibility and openness • Versatility • Ability to shift perspectives • Interdisciplinarity 	<p>Design-thinking comprises the ability to use concrete methods to carry out open-ended creative development processes and to involve all stakeholders in a joint problem identification and solution design process.</p>
<p>Innovation competence</p> 	<ul style="list-style-type: none"> • Creativity • Innovative thinking • Willingness to experiment 	<p>Innovation competence includes the willingness to promote innovation as an integral part of any organizational object, topic and process and the ability to contribute to the organization as an innovation ecosystem.</p>

<p>Systems competence</p> 	<ul style="list-style-type: none"> • Systems-thinking • Knowledge about knowledge structures • Navigation competence within knowledge structures • Networked thinking • Analytical competence • Synergy creation • Application competence • Problem-solving • Adaptability 	<p>Systems competence is the ability to understand complex psychological, social, and technical organizational systems and understand their consequences, as well as to conduct coordinated planning and implementation processes for new initiatives within the system.</p>
<p>Digital literacy</p> 	<ul style="list-style-type: none"> • Media literacy • Information literacy 	<p>Digital literacy is the ability and disposition to use digital media, the skills to develop digital media in a productive and creative way, the capacity to critically reflect on digital media's usage and the impact it has on society and work, and the understanding of the potentials and limits of digital media and their effects.</p>
<p>Co-Creation – Organization-related competences</p>		
<p>Sensemaking</p> 	<ul style="list-style-type: none"> • Meaning creation • Value orientation 	<p>Sensemaking comprises the willingness and ability to construct meaning and understanding from the rapidly changing structures of meaning within future work and life contexts, to further develop existing structures of meaning, or to promote the creation of new ones where they have been lost.</p>

<p>Future and design competence</p> 	<ul style="list-style-type: none"> • Willingness to change • Ability to continuously improve • Future mindset • Courage for the unknown • Readiness for development • Ability to challenge oneself 	<p>Future and design competence is the ability to master the current situation with courage for the new, willingness to change, and forward thinking. This competence is needed to develop situations into other, new and previously unknown visions of the future and to approach these creatively.</p>
<p>Cooperation competence</p> 	<ul style="list-style-type: none"> • Social intelligence • Team-working ability • Leader as a coach • Intercultural competence (organizational culture) • Counseling competence 	<p>Cooperation competence is the ability to cooperate and collaborate in (intercultural) teams either in face-to-face or digitally-aided interactions within or between organizations with the purpose of transforming differences into commonalities. Social intelligence, openness, and advisory skills play a key role for this competence.</p>
<p>Communication competence</p> 	<ul style="list-style-type: none"> • Language proficiency • Presentation competence • Capacity for dialogue • Communication readiness • Consensus orientation • Openness towards criticism 	<p>Communication competence entails not only language skills, but also discourse, dialogue, and strategic communication, which - taken together - serve the individual to communicate successfully and in accordance with the respective situation and context, taking into account their and others' needs.</p>

Individuals can develop Future Skills in three interrelated “poles”:

- **Subject-related:** skills developed in relationship to themselves.
- **Object-related:** skills developed to deal with a task, topic, or object.
- **World-related:** Skills developed in relation to the organizational environment or social system.

In highly emergent contexts, all three poles and their relation to each other are always determinant in every action. Because of the close interconnectedness of all three poles, we refer to this concept as the Future Skills Triple Helix model. The resulting concept is suitable for the formal description of actions in highly emergent contexts.

The classification criterion for Future Skills profiles are as follows:

1. Subject or time dimension - learning: Relation of an individual to themselves in the present, past or future.
2. Object dimension - development: Relation of an individual to a certain object.
3. Social dimension - co-creation: Relationship of an individual to a person or a group in the world.
4. All three dimensions are in turn interrelated and influence each other. The three dimensions thus form the Future Skills Triple Helix DNA, in which the three skill dimensions interact in concrete actions. This model enables a better understanding of the factors that make up future action skills.

Future scenarios in higher education

With Future Skills becoming more important for all domains of living and learning, higher education must not only focus on transmitting knowledge but also reflecting on and promoting Future Skills. Today, higher education is still strongly tied to a single institution. In general, a student enrolls in an institution directly after graduating high school and later graduates from that institution. They study a predefined curriculum with predetermined content to achieve prescribed learning objectives, usually derived from a specific occupational field or academic discipline. Degree programs are located within an academic discipline or faculty uni.

The NextSkills research project identified four potential future scenarios that could influence the future development of higher education institutions, shifting this status quo. These scenarios are: a Future Skills focus, Multi-institutional Study Pathways, Personalization of Academic Learning, and Lifelong Learning in Higher Education.

Scenario 1: The Future Skill-University



In this scenario, Higher Education is mainly focused on developing the Future Skills of its graduates. Such an organization goes beyond the mere teaching of skills for knowledge application and transcends the focus on defined curricula for fixed job profiles. Students are instead engaged in reflection, application, and creative development of new knowledge and academic methods. The main focus is thus on the development of Future Skills, which should enable students to act successfully in unknown future contexts of their professional field and beyond.

Scenario 2: The Multi-Institutional Network University



This scenario showcases how the standard study experience at universities is shifting from mono- to multi-institutional, with large parts of degree programs offered by alliances of several institutions. Study paths are increasingly organized in a multi-institutional and patchwork manner. Cooperation and digital import and export of curricula play an important role. From the student perspective, institutional boundaries are becoming less important.

Scenario 3: The Personalized MyCurriculum University



In Scenario 3, student autonomy increases significantly. Students are guided by professors, teachers, and advisors to put together their own curriculum by compiling their academic study portfolio from different courses and offerings from different institutions. Disciplinary boundaries of study programs become more flexible. The main focus is on students' growing degree of autonomy and their personal study needs as well as their future professional context.

Scenario 4: The Lifelong Learning University



In the fourth scenario, seamless lifelong higher learning becomes as important as initial higher education. Professionals make up the majority of students. Students select their modular portfolio according to their personal skills needs and competency requirements with a high degree of autonomy over their lifetime. Institutions offer micro-credentials that students can acquire individually according to their own interests and needs.

The role of higher education in promoting Future Skills

If the current higher education model is transferred to a Future Skills model, which structures will gain in importance? If one takes the changed framework conditions in an educational society and the pressure affecting academic qualification processes as a basis, new demands on higher education institutions for a modern, further developed higher education model arise from this. Higher education must be restructured to play its important role in helping to make our societies resilient and future-proof. The following aspects (Table 2) are the outcome of a thought experiment; they display the development corridor in which higher education institutions are currently situated. The university of the future will have to position itself to these key points.

Table 2: Projecting higher education into the future

Dimension	Current higher education model	Future higher education model (postmodern)
from... (possible development path) ...to		
Degrees	The aim is to achieve a clearly defined comprehensive study degree, with the degree designations being awarded by the higher education institution on a statutory, sovereign basis.	The program consists of small study units, which can also come from different (higher education) institutions. There will be more short courses, certification courses, refresher courses. This results in patchwork studies that can then be combined into larger final degrees or certificates, such as a final degree, and certified by a higher education institution.
Recognition of prior learning, knowledge & experience	Recognition is possible, but there is little actual recognition practice.	A great deal of recognition of prior learning focuses on practice, and higher education institutions develop professional processes for competence measurement and the recognition of previous performance and experience.

Dimension	Current higher education model	Future higher education model (postmodern)
Certification	Teaching/transfer (tutoring, courses), examinations and certification are linked within the framework of an institution.	Teaching/transfer (tutoring, courses), examinations and certification (final examination) are decoupled and can be offered by various institutions.
Study pathways/ timing	<p>The course of studies is clearly defined by study and examination regulations and is mostly predetermined.</p> <p>Studies are structured according to time units.</p> <p>Clear differentiation between part-time and full-time structure.</p>	<p>The course of studies is flexible and determined by a wide range of electives.</p> <p>Studies are structured on the basis of content criteria. More flexible, individualized time structures and more extra-occupational and lifelong models are used.</p>
Curriculum	<p>Clearly defined qualification goals are set in the degree course, which apply equally to all students and from which the contents and methods of the modules are derived during the course of study.</p> <p>Professional profiles are used as a normative paradigm for course material.</p>	<p>The study content is increasingly oriented towards long-term employability and individual educational goals, interests, and needs. The focus is on more fundamental action competences and the capacity to acquire and use comprehensive skills.</p>
	Methods and contents are oriented towards faculties and disciplines in a canonic way.	The curriculum is oriented towards central issues of an area of practice. Problem orientation calls for a more interdisciplinary focus.
	Little digital import of curricula	Strong digital cooperation and digital interaction between academic institutions

Dimension	Current higher education model	Future higher education model (postmodern)
Science and research structure or institution structure	Higher education institutions are structured in faculties, which are decisive in terms of content and structure of studies.	Higher education institutions are organized by interdisciplinary and transdisciplinary cooperation. Studies are organized on the basis of comprehensive issues as well as interdisciplinary and transdisciplinary work units.
Learning model	Learning primarily follows the idea that a knowledge divide exists and must be compensated for. Teaching is expert-oriented. Teachers organize knowledge transfer.	Learning follows students' ideas and teachers forming a learning community (this could be seen as a renaissance of the <i>Universitas</i> ideal).
	Learning is oriented towards examinations. Study is focused on certification. Many exams are conducted for a detailed module structure.	The learning experience is central, feeding on the students' interests and self-developed issues. Examinations take place on a larger scale on overarching topics and competences.
Examinations	Many exams are module-oriented and often designed to reproduce knowledge.	Examinations are competence-oriented, multimodal, take place at greater intervals, and cover larger areas.
Organizational framework	Institutional Structure: A higher education institution acts as study place and provider	Institutional diversity: Several academic institutions are involved. Students organize study frameworks and flexible study processes adapted to their needs

Dimension	Current higher education model	Future higher education model (postmodern)
Reputation	The institution's reputation determines the value of the degree on the labor market.	Students tend to document their skills and experience in assessments, including qualitative elements like portfolios. The value of the degree is based above all on the practical relevance of the studies, the experience gained and the demonstrated capacity to act.
Permeability	There are clear thresholds between academic and non-academic programs in school, vocational training, and higher education.	Permeable continuum between fields of education such as school, vocational training and higher education, as well as between the respective compatible levels of education of national and qualifications frameworks.

Conclusion

What is the role of higher education in bridging current and Future Skills gaps? The answer is not a singular one, because contexts and challenges vary across countries, institutions, individuals, and disciplines. However, it is clear that higher education institutions must take responsibility in reflecting on their roles in empowering students to master today and tomorrow's complex challenges and by promoting Future Skills throughout their programs.

This can take place on many levels, from whole-institutional approaches to small learning nuggets being included in single classes. However, it is central to reflect on the changing role of knowledge and its consequences for higher education. As evidenced by the introduction of this article, which was created by artificial intelligence, knowledge is easily accessible and cannot only be located within the walls of higher education institutions. It is the steps afterwards that institutions must focus on: building values, attitudes, and skills to enable students to become reflective, autonomous, and ethically responsible individuals that are able to imagine and work towards better futures collectively with others.

For this, future higher education institutions need to enter a joint dialogue on which Future Skills matter and what a good future should look like. The dialogue must engage a range of stakeholders, such as students and teachers, to create the future of higher education (Ehlers & Eigbrecht, 2021; Eigbrecht & Ehlers, 2022). Students should be understood as active learners, and not only future employees, but citizens and social beings who act and learn in multiple contexts and are already co-creating the future.

References

1. Agentur, Q. (Ed.). (2021). *Future Skills: Welche Kompetenzen für den Standort Baden-Württemberg heute und in Zukunft erfolgskritisch sind*. <https://www.bw.igm.de/news/meldung.html?id=101055>
2. Ehlers, U.-D. (2020). *Future Skills – Future Learning, Future Higher Education*. <https://nextskills.org/wp-content/uploads/2020/03/Future-Skills-The-Future-of-learning-and-higher-education.pdf>
3. Ehlers, U.-D. (2022a). *Future Skills – The Future of Higher Education and the Future of Learning: Executive summary of the NextSkills study on Future Skills*. https://next-education.org/wp-content/uploads/2022/08/Future-Skills-Report-Eng_V9.pdf
4. Ehlers, U.-D. (2022b). *Future Skills compared: On the construction of a general framework for future competencies in academic education*. https://nextskills.org/wp-content/uploads/2022/07/2022-06-15-Future-Skills-Bildungsforschung_final_Vs_2ENG.pdf
5. Ehlers, U.-D. (2022c). Shaping the Future Skills Turn: Zukunftskompetenzen für den Kulturwandel in Hochschulen in einer Welt im Wandel. *Personal in Hochschule Und Wissenschaft Entwickeln*(2). <https://www.personalentwicklung-wissenschaft.de/de/handbuch/gliederung/?articleID=3394#/Beitragsdetailansicht/310/3394>
6. Ehlers, U.-D., & Eigbrecht, L. (2021). Rekonstruktion subjektiver Studiererfahrungen im <Shutdown> der Corona-Pandemie. *MedienPädagogik: Zeitschrift Für Theorie Und Praxis Der Medienbildung*, 40, 430–448. <https://doi.org/10.21240/mpaed/40/2021.11.27.X>
7. Eigbrecht, L., & Ehlers, U.-D. (2022). Forward-looking Futures: Die Zukunft der Hochschulbildung aus Studierendensicht: Eine vorläufige explorative Analyse. In B. Standl (Ed.), *Medien in der Wissenschaft: Vol. 80. Digitale Lehre nachhaltig gestalten* (1st ed., pp. 184–193). Waxmann.
8. Hippler, H. (2016). *Wozu (noch) Geisteswissenschaften?* Rotary International. <https://rotary.de/bildung/wozu-noch-geisteswissenschaften-a-8984.html>
9. Kummert, T. (2017). *Endlich einer, der nicht nur Formeln anwenden kann*. <https://www.sueddeutsche.de/karriere/arbeitsmarkt-endlich-einer-der-nicht-nur-formeln-anwenden-kann-1.3623308>
10. OECD. (2019). *OECD Future of Education and Skills 2030: OECD Learning Compass 2030. A Series of Concept Notes*. http://www.oecd.org/education/2030-project/teaching-and-learning/learning/learning-compass-2030/OECD_Learning_Compass_2030_Concept_Note_Series.pdf
11. OpenAI. (2022). ChatGPT. December 23 2022. <https://chat.openai.com>
12. Placke, B., & Schleiermacher, T. (2018). *Anforderungen der digitalen Arbeitswelt: Kompetenzen und digitale Bildung in einer Arbeitswelt 4.0: Gutachten im Auftrag des Bundesverbands der Personalmanager e.V. (BPM)*. <https://www.iwkoeln.de/studien/beate-placke-thomas-schleiermacher-kompetenzen-und-digitale-bildung-in-einer-arbeitswelt-40.html>

Student-Centered, Student-Ready: The Future of Higher Education

Bruce M. Mackh, Vice Provost for Assessment and Chief Accreditation Officer at Wright State University

For centuries, higher education was a privilege available to only a limited segment of the world's population, usually linked to wealth and social class. Traditional “college-ready” students were financially dependent on their relatively affluent parents, were 18-22 years old, possessed a strong academic background, and were both unmarried and childless. Beginning in the 19th and 20th centuries, colleges and universities grew and expanded, shaped by social and cultural norms. Today, a college education has become a reality for more people worldwide, many of whom no longer fit that “traditional” profile. Many are financially independent, over the age of 25, come from lower-income families, have children and may or may not be married. They also tend to have an average academic background that may not have adequately prepared them for success in college. Meanwhile, our institutions have not kept pace with the changing identities of our students. As Byron White, Vice President and Chief Diversity Officer at Cleveland State University, explained:

Colleges and universities, for the most part, have been equipped to serve one fairly narrow population of students, which institutions have conveniently defined as college-ready. Meanwhile, for decades, higher education has passively accepted the conventional wisdom that minority, low-income, and first-generation students disproportionately underperform other students because they are the unfortunate casualties of inadequate systems – low-achieving public school systems, poor neighborhoods, unsophisticated households – that leave them woefully unprepared for college success. (2016)

In other words, students do not underperform because they come to us with disadvantages compared to their “college-ready” peers – they underperform because our systems were built to serve a narrow segment of society that no longer reflects our students' identities.

What does it mean to be student-ready?

Instead of expecting that our students will be college-ready, the future of higher education depends upon our willingness to become student-ready. This means being prepared to teach all the students in our classes, not only those we assume we have or believe we ought to have. Student-ready educators know their students by name and need, then meet those needs to deliver a high-quality learning experience (McNair et al., 2016). To meet this challenge, we must dispel several assumptions educators have long held about their students:

- We cannot assume students possess the skills associated with “college readiness” before they enter our classrooms. They may not read at a college level or possess basic mathematical skills, and they might struggle with writing.
- We cannot assume they have participated in meaningful co-curricular activities, have experienced a comprehensive high school curriculum, or can afford to pay for extras like project supplies.
- Because many of our students are independent adults from lower-income families, we cannot assume they have a social or financial safety net. They must hold down jobs in addition to their studies and may have significant family responsibilities that prevent them from devoting as much time to their studies as we could expect from our traditional (young, single, childless) students.

Becoming student-ready educators means accepting the reality of our students’ identities and seeing them for who they are – people doing their utmost to improve their futures through higher education to make a better life for themselves and their families.

What does it mean to be student-centered?

The Glossary of Educational Reform (2014) defines student-centered learning as: “a wide variety of educational programs, learning experiences, instructional approaches, and academic support strategies that are intended to address the distinct learning needs, interests, aspirations, or cultural backgrounds of individual students or groups of students.”

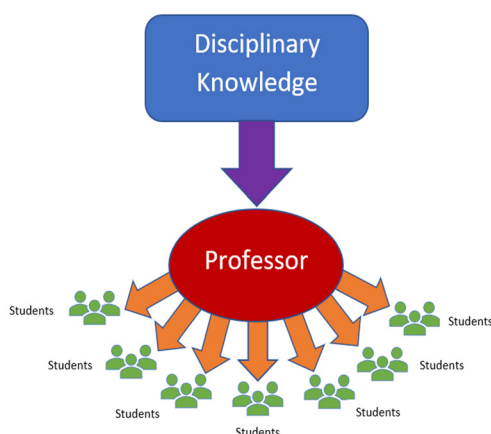


Figure 1: Traditional Model of Instruction

Does this definition describe traditional approaches to teaching and learning in higher education? Historically, faculty have focused on conveying their disciplinary expertise to students through lectures. Our teaching environments reflect this pattern. Lecture halls are often large rooms with theater-style tiered seats all facing the front of the room. The professor delivers a lecture from behind a lectern, often standing in front of a screen, large whiteboard, or chalkboard where the professor can write important points. The implication is clear: the professor,

and to a lesser degree the material, is the center of attention. This description embodies faculty-centered teaching, which has been the model in higher education for millennia.

Traditional approaches to education might be termed “instructivism,” rooted in John Locke’s notion that the human mind is a blank slate at birth. Therefore, education has been conducted in the belief that students’ minds are empty until filled by the professor, who is responsible for delivering a carefully planned program of study. Learners are presumed to possess the academic skills and self-discipline to pay attention to the information presented by the professor and remember concepts even if they don’t fully understand them (Hase & Kenyon, 2001). In this model, instruction is mainly conducted through lectures because students are seen as passive recipients of transmitted information. Exams test students’ memory of the information presented through lectures and readings, but they offer few opportunities to see whether students can apply their knowledge in real-world contexts or even whether they truly understand the course content.

Student-centered learning relies on constructivism, as proposed by Jerome Bruner (1966), who identified learning as an active process through which students build new knowledge upon prior learning – a belief consistent with recent research into cognitive neuroscience (Jang et al., 2019). Student-centered pedagogies employ active participation in the learning process: students might design their own projects, work in collaborative teams, or pursue avenues of research aligned with their interests and career goals.

Student-centered learning demonstrates three key characteristics (McNair et al., 2016):

- Instruction accommodates learners’ goals, needs, interests, aspirations, and cultural backgrounds.
- Assessments measure students’ acquisition of the knowledge, skills, and competencies specified in the course’s objectives and outcomes.
- Learning activities reflect student voice and choice: subject to parameters determined by the professor and the institution, and students determine how, what, where, and when they will learn.

However, student-centered learning **does not** imply that students control every aspect of the learning environment. The professor remains the subject-area expert, establishes expectations for learning within the classroom, and evaluates students’ work. Nevertheless, students are not passive recipients of transmitted knowledge in a student-centered classroom. The professor sets the purpose for learning and provides background information sufficient to empower students on a journey of discovery. Students engage in active learning tasks designed by the professor to construct disciplinary knowledge and skill.

Learning occurs at the point of contact between the student, the faculty member, and the course content, occurring within the dual contexts of the discipline and the institution. To be student-centered is to recognize and value the five components of this equation and recognize that each exerts an influence over the most important activity at our universities: student learning.

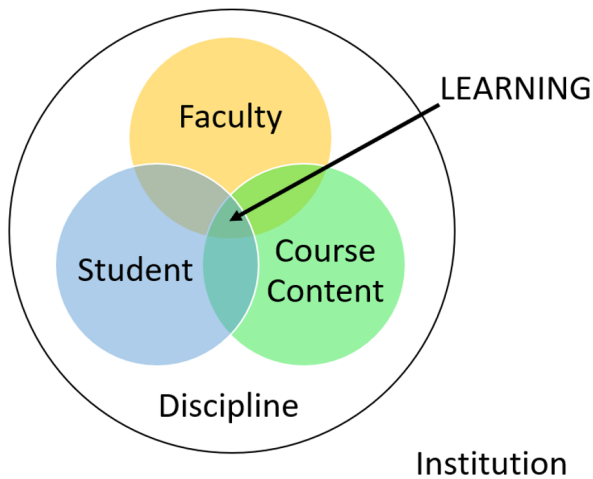


Figure 2: Learning-Centered Model of Instruction (Mackh, 2018)

The benefits of becoming student-centered institutions are compelling. Focusing on student success increases retention, promotion, and completion, which is good for both students and institutions. Successful graduates produce robust alumni outcome data and bolster institutions' reputations. At the same time, graduates who are satisfied with their educational experiences are our institutions' best brand ambassadors. They form strong alumni networks, increase our base of prospective donors, and encourage

their children to enroll. In other words, **our students' success is our success** as institutions and as individual educators. A further rationale for adopting a student-centered mindset is that teaching is a service-oriented profession, as is medicine and law. Doctors serve their patients. Lawyers serve their clients. Likewise, professional educators serve their students by providing an education. They serve their institution by meeting contractual obligations for service, such as committee participation. They also serve their professional discipline through research or creative practice and training the next generation of disciplinary professionals.

A service-oriented, student-centered mindset means caring about students as people and being concerned for their wellbeing. It does not dilute academic rigor or demand we say "yes" to every student request. Rather, it means being willing to prioritize students' success over rigid enforcement of classroom policies or convenience. Most of all, a service-oriented, student-centered mindset is about letting go of expectations for who our students "should" be and choosing to meet their needs where they are so every student can succeed.

The Big Six

Research shows that faculty members play an outsized role in students' academic achievement and lifelong success (Woodside et al., 1999). The 2014 Gallup-Purdue Index (Seymour & Lopez, 2015) concluded that *where* a student goes to college is far less important than *how* they go to college. This survey of more than 30,000 graduates measured workplace engagement, elements of wellbeing (purpose, financial, social, community, and physical), and alumni attachment to their alma mater. Researchers identified six factors that are “so strongly related to graduates’ lives and careers [it] is almost hard to fathom . . . yet few college graduates achieve the winning combination.” Only 3% of all those surveyed reported having all six of these key experiences. Even those who had just three or more experienced higher degrees of wellbeing and career engagement. Gallup-Purdue dubbed these factors the “Big Six” (2014):

- Professors who made students feel excited about learning.
- Professors who cared about students as people.
- A mentor who encouraged students to pursue their goals and dreams.
- The opportunity to work on a long-term project.
- Taking part in an internship or job where students could apply what they were learning in the classroom.
- Being extremely active in extracurricular activities and organizations during college.

The following sections examine each of these factors more closely.

Professors who make students feel excited about learning

As professors, our passion for our disciplines is contagious. The more excited we are about what we teach, the greater the positive effect on our students. We can communicate this excitement to students by sharing our ongoing research or creative practices, bringing interesting examples to class, and demonstrating enthusiasm for our course content. We can also ignite our students' excitement for learning by using teaching techniques that foster student engagement, such as discussion, projects, fieldwork, and workplace connections. Where lecture remains the primary teaching method, employing techniques to engage the audience's interest can generate engagement, such as an energetic and positive speaking style, multimedia content, and appropriate humor (Chingos, 2016).

Professors who care about students as people

Every interaction between students and faculty has the power to make or break the student's learning experience. Demonstrating empathy and compassion has a more lasting impact than insisting on rigid adherence to classroom policies (Chingos, 2016; Carrell & Kurlaender, 2020; Miller & Mills, 2019).

A mentor who encourages students to pursue their goals and dreams

Mentoring can occur formally or informally. Mentors take a personal interest in a student and verbalize their belief in their potential for success. Students need to know that someone on campus "has their back", that there is someone they can turn to who understands their needs and aspirations, and who can be counted on for support and encouragement (Trolan, et al.; Pascarella & Terenzini, 1978; Pascarella et al. 1978; Endo & Harpel 1982; Woodside et al., 1999; Umbach & Wawrzynski, 2005; Cho & Auger, 2013).

The opportunity to work on a long-term project

Projects that last for a semester or more allow students to engage deeply with the topic of investigation. This aspect of the Big Six overlaps with the High-Impact Practice of involving undergraduate students in faculty research (discussed further later in this paper) (Gartner et al., 2020). Participation in long-term projects fosters the development of the "Four C's" – skills and competencies in high demand in the workplace (Strauss, 2017). These are:

- Collaboration and the ability to work well with others.
- Communication across contexts and audiences.
- Critical thinking and the ability to solve complex problems.
- Creativity and innovation.

Taking part in a job or internship where students can apply what they are learning in the classroom

Learning is most effective when it is meaningful and relevant to students' lives or aspirations. Building classroom connections to the workplace provides opportunities to apply learning to real-world contexts, building students' understanding of its value. Workplace connections also help students build a professional network, broaden their understanding of career options, and introduce them to workplace norms and behaviors, all of which are essential to professional achievement (Nunley, Pugh, Romero, & Seals, 2016).

Being extremely active in extracurricular activities and organizations during college

Participation in purposeful co-curricular activities fosters positive results in retention, persistence, and academic achievement. Students experience an enhanced sense of belonging, capacity for humanitarianism, and growth in interpersonal and intrapersonal competence. Asco-curricular activities take time away from students' studies, this point may seem counterintuitive to their success. However, the more involved students are, the more connected they feel to the institution and their peers, and the greater their likelihood of high academic achievement (Shea, 2018). Here are a few suggestions as to how we might apply the Big Six in our classrooms:

- **Professors who make students feel excited about learning:** Study how you can improve your instructional delivery to become more dynamic and inspiring, in order to make students feel excited about learning.
- **Professors who care about students as people:** Set a personal goal to know every student by name and need from the beginning of the academic year.
- **A mentor who encourages students to pursue their goals and dreams:** Professors should think of themselves as mentors, directly connecting with their students. It might not be possible to adopt this role with every student taught, but those majoring in your discipline, especially those you've taught in more than one course, could and should receive more than cursory attention from you. Check up on those students regularly and provide academic and emotional support as needed and appropriate.
- **The opportunity to work on a long-term project:** Utilize project-based learning to engage student interest, provide a meaningful context for acquiring academic skills and competencies, build interpersonal relationships, and acquire disciplinary knowledge related to the project.
- **Taking part in an internship or job where students could apply what they were learning in the classroom:** Incorporate internship or practicum experiences, if appropriate, including partnerships with local businesses, organizations, or agencies. Practical experiences could also include volunteering or opportunities for community service.
- **Being extremely active in extracurricular activities and organizations during college:** Promote engagement in co-curricular opportunities and strongly encourage students to join these organizations. This can include field trips, service projects, group outings to off-campus locations, or events connecting classroom learning to real-world settings.

Moreover, the characteristics of student-centered teaching reflect the ethos of the Big Six (Finley & McNair, 2013; Holden, 2017; Kuh, 2008; Kuh et al., 2013):

- Faculty communicate subject-area knowledge through learning activities that foster higher-order thinking.
- Learning activities accommodate students' differences as learners, allowing for student choice, which increases motivation, engagement, and participation in the learning process.
- Faculty establish the classroom environment as a community of learners that supports all members and fosters collaboration, respect for others' perspectives, exploration, and reflection.
- Faculty provide ongoing formative assessments and constructive feedback on students' work.
- Criteria for assessments are clear and aligned with the course's objectives and outcomes.
- Faculty adapt instruction to meet students' needs, both for the whole group and for individual students.
- Faculty remain flexible in their approaches to instruction and engage in continuous reflection and improvement of their curricula and pedagogies.

Student-centered educators also practice inclusion, accommodating learners' differences and addressing systemic inequalities by creating a classroom where every student is valued, supported, inspired, and encouraged. Inclusive educators adjust their teaching in response to formative assessments. They also monitor students' progress and engagement, following up with them as soon as they fall behind or develop a pattern of absenteeism or non-participation.

Our attitude toward our students is not the only aspect of our teaching that changes when we as educators become student-centered. We also change our approach to assessment, measuring students' success in achieving the course objectives and outcomes, not just their exam scores. In other words, success is determined by whether the student learned what the course was designed to teach. Authentic assessment uses methods such as projects, performance tasks, observations, and reflective essays in combination with traditional assessments such as exams. It also includes making our assessment criteria transparent by explaining how students can demonstrate their achievement of course objectives and outcomes, providing a rationale, and making explicit connections to the application of students' learning beyond the course.

One of the most important aspects of being a student-centered educator is committing to seeing students as individuals. Although not every faculty member can undertake the responsibility of mentoring every student in every class, we all choose to be kind, empathetic, and supportive in our interactions with every student. Student-centered educators reject the time-worn attitude that

their responsibility ends with “setting the table” for students; they take ownership for encouraging students’ achievement in their courses. Student-centered educators are not content to allow students to fall through the cracks. Instead, they are proactive and reach out to students whose grades or attendance are falling.

Generations of faculty have seen problems as residing within the student rather than in socio-cultural inequities. This attitude often masks implicit biases, such as the belief that certain groups of people lack the intellectual capacity for college-level study, or the assumption that people who live in poverty are lazy or financially irresponsible. Student-centered educators reject these perspectives and strive to address inequalities instead of accepting them as inevitable or irremediable.

High Impact Practices

George Kuh identified “High Impact Practices” (HIP) that significantly benefit students, especially those from populations historically underserved in higher education (AAC&U, 2021). These practices demonstrate one or more of the following Key Elements (Kuh et al., 2013):

- Performance expectations set at appropriately high levels.
- A significant investment of time and effort by students over an extended period.
- Interactions with faculty and peers about significant matters.
- Experiences with diversity.
- Frequent, timely, and constructive feedback.
- Periodic, structured opportunities to reflect and integrate learning.
- Opportunities to discover the relevance of learning through real-world applications.
- Public demonstration of competence.

First-Year Seminars and Experiences aim to increase retention by strengthening student engagement and fostering academic success by helping students connect with the institution, become familiar with the campus’s resources and services, and develop academic skills (Hickinbottom-Brawn & Burns, 2015). Although First-Year programming generally occurs at the institutional level, every course can incorporate elements of First-Year Seminars or Experiences. For example, instructors can:

- Explain the connection between the course and students’ subsequent studies or adult lives.
- Provide information about relevant campus services and resources (Writing Center, Tutoring Center).
- Incorporate direct instruction in crucial academic skills.
- Address personal competencies such as time management and attendance.
- Establish a personal connection with each student through frequent targeted communication.

Common Intellectual Experiences are activities that carry through two or more courses to provide a shared experience (Baker & Pregitzer, 2018). Common Intellectual Experiences usually share these elements:

- An interdisciplinary theme.
- Shared content between courses.
- Faculty collaboration.
- Co-curricular connections.
- Strategies for active learning.

A “common read” in which the entire campus community reads the same book is a well-established part of this HIP. Each course could include some elements of Common Intellectual Experiences. As a few examples, faculty can:

- Include an activity that builds meaningful interaction between students and faculty, such as reading an impactful book.
- Explore themes and ideas that carry throughout the course.
- Incorporate opportunities to reflect on learning.
- Include activities that connect the course content to the world outside the university.

Learning Communities include strategies like linked courses, freshman interest groups, meta-majors⁸, and living-learning communities. The primary purpose of Learning Communities is to foster connections between and among students, faculty, and staff by employing three strategies (Otto et al., 2015; Tinto, 2003):

- **Shared Knowledge:** students register for a pair or group of courses organized around a central theme, designed to promote higher levels of cognitive complexity than unrelated courses.
- **Shared Knowing:** students build relationships as they construct knowledge together, promoting social and intellectual engagement, cognitive development, and appreciation for others’ perspectives.
- **Shared Responsibility:** coursework offers frequent opportunities to participate in collaborative groups through which students develop essential skills in teamwork, cooperation, problem-solving, negotiation, communication, and accountability.

⁸ clustered courses within a field of interest providing opportunities for exploration of various majors in the field

As with the previous HIPs, educators can build these aspects into their courses. For example, they can:

- **Shared Knowledge:** structure the course around a central theme or topic to create a cohesive, comprehensible, and engaging body of knowledge.
- **Shared Knowing:** build opportunities for peer-to-peer interaction through small group discussions or collaborative projects.
- **Shared Responsibility:** utilize strategies for active learning such as discussion groups, partner activities, or collaborative projects.

Writing-intensive courses integrate specific instruction in expectations for written communication across curricular areas. Characteristics include (Harvard Writing Project, n.d.):

- Timely feedback on student writing, both written and spoken, during one or more conferences between the student and instructor.
- Opportunities for revision of written work, including a sequence of draft, feedback, rethinking, rewriting, peer feedback, and evaluation.
- Multiple or sequential writing assignments throughout the semester or a longer paper completed in installments.
- Small class sizes or the capacity for small sections within larger classes ensure students receive individual attention.
- A significant portion of the student's grade depends on the quality of thought expressed in good writing.

Writing is a ubiquitous academic activity. Incorporating the characteristics of a writing-intensive course into existing teaching practices can improve the quality of students' written communication. Our task is to teach students the norms and practices of professional communication within our disciplines by including specific lessons about disciplinary writing as appropriate to the course.

Creativity-Infused Learning (The Missing HIP) addresses deficits created by the environment of high-stakes standardized testing in which our students were raised, which has instilled beliefs that are antithetical to creativity (Meng, 2016). For example, students often believe there is one right answer to a question, and move on after finding it. They believe mistakes to be bad and avoided at all costs. They study only what will be on the exam. And they think optimal workflow proceeds in a measured and orderly fashion (Markman, 2016).

Creativity is a capacity all humans possess, not a special gift given to only a few fortunate individuals from birth. Infusing creativity training into our courses can help students move beyond the limiting assumptions they have acquired and rediscover their innate capacity for creativity, which is among the qualities most sought-after by employers.

- Include opportunities to identify problems or discover multiple solutions to open-ended problems. Problem-finding asks students to identify missing information or apply intellectual or imaginative vision, leading students to think deeply and ask critical questions.
- Ask open-ended questions as students are working. Avoid answering students' questions directly. Saying, "I don't know, what do you think?" sparks further thinking, while saying, "Here's a website with a tutorial that shows you how to make a ____" shuts it down.
- Incorporate both individual projects and collaborative work to meet the needs of students with different learning styles.
- Allow students to respond to discussions or assignments creatively, not only in writing but through poetry, imagery, music, movement, or role-playing.
- Debrief each project, encouraging students to reflect on what they learned through both success and failure.

Collaborative assignments and projects build on the idea that learning is an active, integrated, and constructive process influenced by social and contextual factors, recognizing that emotions occurring during social behavior directly influence the brain's processes of learning and memory (Science Daily, 2015). Approaching learning in the spirit of collaboration rather than by emphasizing individual achievement offers meaningful preparation for professional engagement in increasingly collaborative workplaces (IBM CEO study, 2012).

The course's academic discipline will shape the possibilities for collaborative assignments or projects. Setting our students up for success by providing overt instruction in collaboration, teamwork, and problem-solving can prevent some common drawbacks (Scager, et al., 2016). We should also establish clear expectations for group and individual performance, participation, and achievement. We can amplify student's learning when we ensure equity of access, integrate experiences with diversity; and discuss connections between the course's topic, the academic discipline, and real-world issues.

Undergraduate research experiences tend to occur in two main contexts. Course-based research embeds student research participation in the curriculum, including an emphasis on teaching students the norms and practices of research through a combination of instruction and direct experience. Experiential learning settings such as summer seminars allow students and faculty to

work together on long-term, meaningful projects. In both contexts, students actively engage in the research process, working alongside a mentor who guides them, often in an apprenticeship model. The mentor is usually a faculty member but could also be a graduate student, post-doctoral researcher, or upper-class peer (Hensel, 2012; Elon University, n.d.).

Because most faculty are active researchers or creative practitioners, we can incorporate research into our undergraduate courses by: identifying aspects of our research or creative practice that intersect with the content or topic of the course; sharing our research or creative practice with students; explaining areas of intersection; and including students in our research or creative practice, even if on a small scale.

Diversity and Global Learning are increasingly important in the multicultural and globally connected world students will inhabit after graduation. We build classroom diversity when we teach students how to learn in collaboration with others rather than learning about others (AAC&U). Diversity tends to focus on the composition of our immediate culture, while global learning focuses on our interactions in a global interconnected world. Teaching in these areas emphasizes leading students to shift their perspective (University of Colorado at Denver, 2016). Some approaches in this HIP include:

- Problem framing: a purposeful examination of how different people define and experience local, intercultural, international, and global challenges to human and environmental wellbeing and problem-solving.
- Perspective consciousness: insight into one's own beliefs, values, and assumptions and how these are like or unlike those held by others at home and abroad.
- Global perspective: the ability to analyze a complex trans-border problem and consider multiple interpretations of its causes, consequences, and proposed solutions.

Incorporating these strategies into our courses requires that we first reflectively and honestly examine our own attitudes towards diversity and teach students to think critically and reflectively to develop an awareness of their own biases and preconceptions as well as examining others' ideas (Doscher & Landorf, 2018). Providing students opportunities to work in diverse groups and participate in experiential learning activities in unfamiliar cultures and environments helps expand their understanding and acceptance of others. We can also provide readings and multimedia that expose students to the points of view of people different from themselves, and hold follow-up discussions.

ePortfolios are both a product and a process. As a product, they are a curated digital showcase of students' learning, achievements, and accomplishments (Watson, et al., 2016). Portfolios can include artifacts from coursework and co-curricular activities, work experiences, volunteering, and more (Tosh et al., 2005). As a process, creating ePortfolios provide opportunities for students to reflect on their learning, going beyond the simple acquisition of knowledge and skill to incorporate affective, personal, and self-identity dimensions (University of Waterloo, n.d.).

To build this HIP into our courses, we could incorporate the ePortfolio into the course's outcomes and tie assessments of students' portfolios to their course grades, using a rubric for grading and providing formative verbal or written feedback during the semester. Faculty can also share examples of high-quality ePortfolios created by other students, include viewing and commenting on fellow students' ePortfolios in assignment requirements, and encourage students to collect artifacts of their learning throughout the course.

Colleges and universities often maintain that their mission, at least in part, is to prepare their graduates to become contributing citizens who lead lives of service to their communities. **Service-learning and community-based learning** place students in off-campus situations where they experience the social issues they are studying in the classroom; in addition, students interact with community members and engage in activities where they can make a difference (Dewey, 1938; Kolb, 1984; Rogers, 1969, 1994). Many courses establish connections with local partners where students can participate in service or community-based activities related to the course. Prior planning and preparation are the keys to success, as are the following (Band, 2017):

- Establishing clear criteria and expectations.
- Forging connections with community organizations or agencies.
- Clarifying expectations for participation.
- Managing logistics (materials, transportation, and costs).
- Compiling and sharing information with all participants.
- Providing instruction in problem-solving, critical thinking, and other skills relevant to the experience.
- Communicating regularly with partnering organizations.
- Incorporating debriefing and reflection when the project is complete.

Many fields require practical experience as a standard part of student learning. **Internships and practicum experiences** usually involve a short-term, part-time position in a company or organization related to the student's major. Externships are shorter in duration than internships and

usually involve job shadowing or observations rather than authentic work experience. Cooperative or “co-op” education is a specialized internship, often with pay, in which students work alongside professionals in their major field. Co-op often requires students to place their other studies on hold, especially if it is a full-time position (Boyington, 2015).

Although most internships or practicum experiences involve specific coursework or degree requirements, individual faculty can incorporate externships, job shadowing, volunteering, or other workplace-based experiences for their students, following the same processes as service-learning or community-based learning.

Capstone Courses and experiences have been part of higher education for centuries. Doctoral students have written dissertations as evidence of their ability to produce new knowledge in a field of study. Students earning master’s degrees have written a thesis, completed a research project, or presented an exhibition or performance demonstrating their disciplinary proficiency. Capstone experiences can include a culminating course, comprehensive exam (such as those required for certification or licensure in some fields), arts performance or exhibition, significant project or portfolio, or experiential learning such as an internship or practicum experience (National Survey of Student Engagement, 2007).

We can scale capstone experiences to our courses by incorporating a culminating activity that allows students to understand what they have learned, how it can apply beyond the classroom, and how it relates to their lives after graduation. This strategy could be as simple as a final discussion board, a question on the final exam, or a reflective essay. Faculty might also incorporate reflective questions into an existing culminating activity. The point is to prompt students to think about what they have learned and what it means for their futures.

Preparing for the Challenge: Skills for 21st-Century Teaching

Teaching in higher education still requires disciplinary accomplishment and appropriate credentials, just as it has for centuries. However, becoming a student-centered and student-ready educator requires more than attaining status as a disciplinary expert. We must also be capable of managing our responsibilities as educators and delivering a world-class learning experience to our students. Although some of these skills will come naturally to many educators, most result from formal, structured professional development. The following is a long list of skills that instructors can acquire to become student-centered:

1. Active Learning Teaching Techniques
2. Adaptability
3. Advising
4. Applied Learning Techniques
5. Assessment Skills (formative, pre- & post-, summative, in support of various accreditation)
6. Care (A Culture of Care)
7. Change Management
8. Collaboration
9. Communication (clear, effective, timely--written and verbal)
10. Compassion
11. Confidence
12. Conflict Management & Resolution
13. Consistent & Cohesive Instruction Across Sections with Colleagues
14. Constructive Feedback
15. Course Mapping
16. Creativity
17. Critical Thinking
18. Cultural Awareness
19. Decision-making
20. Emotional and Social Intelligence
21. Empathy
22. Ethics
23. Goal Setting
24. Governance (shared and networked governance)
25. Grading

26. Growth Mindset
27. HIPs (all)
28. Inclusivity
29. Information Literacy
30. Instructional Design
31. Leadership (classroom management)
32. Learning Management System Familiarity
33. Lesson Planning
34. Linked Learning (ability to link learning)
35. Maslow + Blooms
36. Meeting Students Where They Are
37. Mentoring
38. Multitasking
39. Negotiation Skills
40. Numeracy (calculating - grades/percentages)
41. Objectives (writing)
42. Optimism
43. Organization
44. Outcomes (writing, assessment, mapping)
45. Patience
46. Persistence + Retention + Completion + Re-recruiting
47. Persuasion
48. Presentation Skills (lecturing)
49. Proactiveness
50. Problem-Solving
51. Professionalism
52. Program Planning & Mapping
53. Project Management
54. Reflectiveness
55. Resiliency (grit)
56. Resource Management
57. Stress Management
58. Student-Ready
59. Teaching Across Multiple Modalities with the Ability to Pivot

60. Teamwork
61. TILT (Transparency in Teaching and Learning)
62. Time Management
63. Understanding
64. Work Ethic

This long list of skills includes some overlapping ideas and crossover with the other topics presented previously. Becoming an excellent educator is not easy, but it's one of the world's most important and rewarding professions.

We can no longer insist on "the way it's always been" if we are to truly serve our students today. The future of higher education lies in our willingness to become student-ready and student-centered as we incorporate the Big Six and HIPs into our classrooms, programs, and institutions.

Remember

Student-ready educators are eager to teach all the students in their classes. They know each student by name and need, then meet those needs to deliver a high-quality education.

Student-centered educators care about their students as individuals and are committed to their success. They utilize teaching methods that prioritize students' learning (including the Big Six and High-Impact Practices).

References

1. AAC&U Making Excellence Inclusive. <https://www.aacu.org/making-excellence-inclusive>
2. Baker, J., Pregitzer, M. (2018). Ch. 3 Common Intellectual Experience. In Linder, K., and Hayes, C. (eds.) (2018). High Impact Practices in Online Education. Stylus Publishing.
3. Band, J. (2017). Community Engaged Teaching Step by Step. Vanderbilt University Center for Teaching . <https://cft.vanderbilt.edu/guides-sub-pages/community-engaged-teaching-step-by-step/>
4. Boyington, B. (2015, March 21). "Understand the Differences Between a Co-op, Internship." *U.S. News: Higher Education*. <http://www.usnews.com/education/best-colleges/articles/2015/03/31/understand-the-differences-between-a-co-op-internship>
5. Bruner, J. (1966). *Toward a Theory of Instruction*. Cambridge, MA: Harvard University Press.
6. Carrell, S., Kurlaender, M. (2020). My Professor Cares: Experimental Evidence on the Role of Faculty Engagement. National Bureau of Economic Research Working Paper No. 27312. doi 10.3386/w27312; see also Miller, A., Mills, B. (2019). 'If they don't care, I don't care': Millennial and Generation Z students and the impact of faculty caring. *Journal of the Scholarship of Teaching and Learning*, Vol. 19, no. 4, pp. 78-89. Doi: 10.14434/josotlv19i4.24167.
7. Chingos, M.M. (2016). Instructional Quality and Student Learning in Higher Education: Evidence from Developmental Algebra Courses. *The Journal of Higher Education* 87(1), 84-114. [doi:10.1353/jhe.2016.0002](https://doi.org/10.1353/jhe.2016.0002).
8. Cho & Auger (2013). Exploring determinants of relationship quality between students and their academic department: Perceived relationship investment, student empowerment, and student-faculty interaction. *Journalism and Mass Communication Educator*, 68, 266268.
9. Dewey, J (1938). *Experience and Education*. New York: Kappa delta Pi.
10. Doscher & Landorf (2018). Universal global learning, inclusive excellence, and higher education's greater purpose. *Peer Review*, 20(1). Association of American Colleges and Universities..
11. Elon University. (n.d.) Center for Engaged Learning: Undergraduate Research. <https://www.centerforengagedlearning.org/doing-engaged-learning/undergraduate-research/>
12. Endo & Harpel (1982). The effect of student-faculty interaction on students' educational outcomes. *Research in Higher Education*, 16, 115138.
13. Finley, A. & McNair, T. (2013). *Assessing underserved students' engagement in high-impact practices*. Washington, DC: Association of American Colleges and Universities.

14. Gallup-Purdue Index. (2014). Great Jobs, Great Lives: The 2014 Gallup-Purdue Index Report. <https://www.gallup.com/services/176768/2014-gallup-purdue-index-report.aspx>
15. Gartner, T., Geedey, K, Bjorgo-Thorne, K., Simmons, J., Shea, K, Dosch, J., & Zimmerman, C. (2020). Strategies for Incorporating Long-Term, Distributed Network Projects into the Undergraduate Curriculum: Lessons from the Ecological Research as Education Network's Decomposition Project. *The American Biology Teacher*, Vol. 82, No. 3. <https://doi.org/10.1525/abt.2020.82.3.142>
16. Glossary of Educational Reform. (2014). Student-Centered Learning. <https://www.edglossary.org/student-centered-learning/>
17. Harvard Writing Project: Guidelines for Writing-Intensive Courses. (n.d.). <https://writingproject.fas.harvard.edu/pages/guidelines-writing-intensive-courses>
18. Hase & Kenyon, 2001. From Andragogy to Heutagogy. <http://www.psy.gla.ac.uk/~steve/pr/Heutagogy.html>
19. Hensel, N., Ed. (2012). Characteristics of Excellence in Undergraduate Research. The Council on Undergraduate Research.
20. Hickinbottom-Brawn, S., & Burns, D. (2015). The Problem of First-Year Seminars: Risking Disengagement through Marketplace Ideals. *The Canadian Journal of Higher Education*. Vol. 45, No. 2., 154-167.
21. Holden, S. (2017). *Student-Centered Learning Environments in Higher Education Classrooms* <https://www.aacu.org/trending-topics/high-impact>
22. *IBM CEO Study: Command and Control Meet Collaboration*. (May 22, 2012). IBM Press release <https://www-03.ibm.com/press/us/en/pressrelease/37793.wss>
23. Jang, Chang Sung; Lim, Doo Hun; Yoo, Jieun; and Yim, Jeong-ha (2019). "An Analysis of Research Trends in Brain-based Learning in Adult Education and HRD Fields: The Content Analysis and Network Text Analysis," *Adult Education Research Conference*. <https://newprairiepress.org/aerc/2019/papers/33>
24. Kolb, D. (1984) *Experiential learning: Experience as the source of learning and development*. Upper Saddle River, NJ: Prentice-Hall.
25. Kuh, G., O'Donnel, K., Reed, S. (2013). *Ensuring Quality & Taking High-Impact Practices to Scale*. Washington, DC: AAC&U.
26. Markman, A. (Jan 4, 2016). Four Things You Learned at School that Make You Less Creative. Inc.com. <https://www.inc.com/art-markman/4-things-you-learned-in-school-that-make-you-less-creative.html>
27. McNair, Albertine, Cooper, McDonald, and Major. (2016). *Becoming a Student-Ready College: a New Culture of Leadership for Student Success*. Jossey-Bass/AACU

28. Meng, T. (May 18, 2016). Everyone is born creative but it is educated out of us at school. The Guardian. <https://www.theguardian.com/media-network/2016/may/18/born-creative-educated-out-of-us-school-business>
29. National Survey of Student Engagement, Experiences That Matter: Enhancing Student Learning and Success, Annual Report 2007 (Bloomington, IN: Indiana University Center for Postsecondary Research, 2007), 20
30. Nunley, J., Pugh, A., Romero, N., Seals, R. (2016). College major, internship experience, and employment opportunities: Estimates from a resume audit. Labor Economics. Vol. 38, p. 37-46 <https://doi.org/10.1016/j.labeco.2015.11.002>
31. Otto, S., Evins, M., Boyer-Pennington, M., Brinthaupt, T. Learning Communities in Higher Education: Best Practice. Journal of Student Success and Retention. Vol. 2, No., 1. Oct. 2015.
32. Pascarella and Terenzini (1978). Student–faculty informal relationships and freshman year educational outcomes. Journal of Educational Research, 71, 183189.
33. Pascarella, Terenzini, and Hibel (1978). Student– faculty interactional settings and their relationship to predicted academic performance. Journal of Higher Education, 49, 450463.
34. Rogers, C. (1969). Freedom to learn. Columbus, OH: Merrill.
35. Rogers, C. (1994). Freedom to learn (3rd ed.). Columbus, OH: Merrill and Palgrave Macmillan.
36. Scager, K, et al. (2016,). Collaborative learning in higher education: Evoking positive interdependence. CBE Live Sciences Education.
37. Seymour, S., & Lopez, S. (2015, April 8). “Big Six” College Experiences Linked to Life Preparedness. Gallup News. <https://news.gallup.com/poll/182306/big-six-college-experiences-linked-life-preparedness.aspx?ga=2.257344514.80664403.1592689990-189468891.1592689990>
38. Shea, H. (2018, January 16). Tracking Co-Curricular Contributions to Student Success at MSU. Michigan State University Hub for Innovation in Learning and Technology. <https://hub.msu.edu/tracking-co-curricular-contributions-to-student-success-at-msu/>
39. Strauss, V. (2017, December 20). The surprising thing Google learned about its employees – and what it means for today’s students. Answer Sheet, Analysis. The Washington Post. <https://www.washingtonpost.com/news/answer-sheet/wp/2017/12/20/the-surprising-thing-google-learned-about-its-employees-and-what-it-means-for-todays-students/>

40. Tinto, V. (2003). Learning Better Together: The Impact of Learning Communities on Student Success. Higher Education Monograph Series, 2003-1, Higher Education Program, School of Education, Syracuse University.
41. Tosh, D., Penny Light, T., Fleming, K., & Haywood, J. (2005). Engagement with electronic portfolios: Challenges from the student perspective. *Canadian Journal of Learning and Technology*, 31(3).
42. Trolan, T., Jach, E., Hanson, J., & Pascarella, E. (2016). Influencing academic motivation: The effects of student-faculty interaction. Project muse. *Journal of College Student Development*, 57(7), 810-826.
43. Umbach & Wawrzynski (2005). Faculty do matter: The role of college faculty in student learning and engagement. *Research in Higher Education*, 46, 153184.
44. University of Colorado at Denver. (2016). Diversity and Global Learning: HIP Best Practices Guidelines. <http://www.ucdenver.edu/student-services/resources/ue/HIP/Documents/D%20GL%20Best-Practices%20Guidelines%2012-2016.pdf>
45. University of Waterloo Centre for Teaching Excellence. (n.d.) ePortfolios Explained: Theory and Practice. <https://uwaterloo.ca/centre-for-teaching-excellence/teaching-resources/teaching-tips/educational-technologies/all/eportfolios>
46. Watson, C., Kuh, G., Rhodes, T, Light, T., Chen, HI, (2016). ePortfolios – The Eleventh High Impact Practice. *International Journal of ePortfolio*. Vol 6, No. 2, 65-69. https://eportfolios.capilanou.ca/devcomm/wp-content/uploads/sites/425/2017/02/ePortfolios_Eleventh-High-Impact-Practice-IJEP_6.2.2016.pdf
47. White, B. (March 21, 2016). The Myth of the College-Ready Student. InsideHigherEd.com <https://www.insidehighered.com/views/2016/03/21/instead-focusing-college-ready-students-institutions-should-become-more-student>
48. Woodside, Wong, &Wiest (1999). The effect of student–faculty interaction on college students’ academic achievement and self concept. *Education*, 119, 730733.

Exploring Future Directions of the Internationalization of Higher Education: Future-proofing your Internationalization Plans

Ayşe Deniz ÖZKAN, İstanbul Aydın University⁹

Abstract

The COVID-19 global pandemic has deeply impacted the internationalization of higher education. The disruption of physical mobility, which previously constituted the core of the practice of internationalization, has caused a paradigm shift. Alternative and broader approaches to internationalization that had long been explored and experimented with finally came to the forefront of the sector. This paper explores the future directions of internationalization based on these approaches. As an international education professional of seventeen years, I have chosen to focus on four potential future directions: Internationalization at Home, Digitalization of Internationalization, Regionalization and transnational education (TNE) partnerships. I have looked at the instruments, benefits, and challenges associated with each future direction and have made some policy recommendations to future-proof internationalization plans at the institutional level.

Introduction

The COVID-19 global pandemic resulted in changes to higher education systems around the world, with impacts on teaching and learning, assessment, quality assurance, and internationalization. While campus closures and the pivot to online teaching received the most attention, the impact of COVID-19 on internationalization has also been significant, both in the general practice and daily operations of international education professionals.

Internationalization of higher education, defined as “the process of integrating an international, intercultural, or global dimension into the purpose, functions or delivery of post-secondary education” (Knight, 2003, p. 33), has been part of the operations of higher education institutions worldwide to varying degrees for more than two decades. It has become part of the mainstream such that higher education institutions include it in their mission-vision statements. Some institutions integrate it in their strategic plans and others devote staggering financial and human resources to developing internationalization.

⁹ Ozkan.aysedeniz@gmail.com

International offices of varying sizes and functions have been set up on university campuses around the world, and a transnational group of international education professionals have flourished. International education conferences such as the Association of International Educators (NAFSA) and the (EAIE) draw thousands of professionals. Internationalization has also become a dimension of university performance in international and national accreditations, quality assurance guidelines, and global/ regional rankings.

Over the last 20 years, theoretical debates around internationalization have expanded and critical approaches were developed. In practice, however, internationalization continued to be dominated by its most visible component: mobility, especially that of students. Recruitment of degree-seeking international students (degree mobility) and/or semester-long study abroad programs (credit mobility) have continued to occupy most of the time, effort, and resources of international offices. Most of the internal reporting and external evaluations have revolved around mobility statistics, the number of degree-seeking international students and/or incoming or outgoing study abroad students.

The COVID-19 global pandemic was a real watershed because the closure of borders suddenly stopped student mobilities. In the early days, the uncertainty was great as to when the borders would open and student mobilities would resume. Was internationalization over? It was not, but the disruption was so great that it made international education professionals stop, question their assumptions, and rethink the practice of internationalization. It was indeed time to go back to the reasons as to why internationalization was deemed necessary or useful in the first place.

Why Internationalization?

Since 2003, the International Association of Universities (IAU) has conducted surveys on the internationalization of higher education. The results of these surveys point to many perceived benefits of internationalization, including: improved quality of teaching and learning, stronger research capacity, improved student employability outcomes, enhanced international cooperation and capacity building, increased revenue, and prestige for the institutions. The 2018 IAU survey revealed that the top two perceived benefits of internationalization were “enhanced international cooperation and capacity building” and “improved quality of teaching and learning” (Marinoni et al., 2019). It is interesting to note that student mobility is not essential or even enough to fully realize these benefits.

Another widely known rationale for internationalization is to prepare students to live and work in a globalized world where national borders are highly permeable, information travels rapidly, and communities and workplaces are increasingly multicultural and diverse (Olson et al, 2006, p.x). Many higher education institutions refer to developing the “global competences” of their students in their internationalization documents and strategies (OECD, n.d.). The focus on global competences have grown, as the concept supports the United Nations Sustainable Development Goals framework. It is increasingly seen as essential to cultivate global citizens who can understand complex global challenges, and work together across national and cultural differences to solve global challenges. Internationalization dominated by student mobility falls staggeringly short of fulfilling its *raison d’être* because so few students undertake either degree or credit mobility.

According to UNESCO statistics, 6 million plus students in higher education were internationally mobile in 2019, up from 2 million in 2000 (add citation). However, 6 million is still only 2.6% of the world’s total student population (Sabzalieva et al., 2022, p.7). Student mobility remains highly exclusive. For degree mobility, the unidirectional flow is from the global South to global North and is sometimes described as “brain drain”. As for credit mobility, even in the global North, a small, privileged group of students can benefit from physical semester-long study abroad programs. Even in the European Union (EU), where Erasmus program funding is available, the target of 20% of students having a short study or training experience abroad by 2020 has not been reached (Lepori, n.d.).

Barriers to physical student mobility are numerous. Lack of financial resources, visa restrictions, and familial obstacles are among the top barriers. Curriculum mismatches and difficulty acquiring recognition for credits achieved abroad are important barriers for credit mobility (EUROSTUDENT, n.d.). Students with disabilities also find it difficult to participate in study abroad programs. Finally, insufficient foreign language skills and low grades can also be barriers to student mobility. Hence, internationalization is recognized as crucial to developing the global competences of students. Yet with so few students having access to physical mobility, the question of how to develop the global competences of “all” students remains critical.

Alternative approaches in internationalization

The concept of Internationalization at Home (IaH) was put forward to address this very question. In the most commonly used definition, IaH is “the purposeful integration of international and intercultural dimensions into the formal and informal curriculum for all students within a domestic learning environment (Beelen & Jones, 2015, p.69). IaH originated in Europe as early as in 1999 and gained acceptance later; it was included in the European Commission’s education policy in 2013. In the US, the critical approach of Comprehensive Internationalization (CI) came about to underline how internationalization could not be limited to mobility activities. CI has been articulated by Hudzik (2011) as follows:

Comprehensive internationalization is a commitment, confirmed through action, to infuse international and comparative perspectives throughout the teaching, research, and service missions of higher education. It shapes institutional ethos and values and touches the entire higher education enterprise. (p. 6)

The American Council on Education has since developed the widely known and referred to CI Framework for higher education institutions. Here, mobility is only one of six elements of CI that coexist with institutional commitment and policy, leadership and structure, curriculum and co-curriculum, faculty and staff support, and partnerships (American Council on Education, n.d.).

Despite all this information, and changes taking place in the field of international education, the daily operations of an international office in most universities historically remained focused on facilitating, administering, and reporting physical student mobilities, that is, until the COVID-19 pandemic threw the field into uncertainty. The result was a paradigm shift. Although the information was already out there, it was previously on the theoretical level, or on the fringes of the field. During the pandemic, a small percentage of our former daily activities became our praxis and the core of the field. This has changed the trajectory of internationalization and opened the path for “future directions” as we move into the post-pandemic era.

Future directions in internationalization

It is ironic to call these directions “future”, as they have roots many years in the past. However, they are now enjoying the full attention they deserve. As an international education professional of seventeen years, I can identify these directions as having the staying power beyond the pandemic and changing the way we conduct our business, our daily operations at the International Office and the internationalization strategy at the organizational level from now on.

Here are the four future directions I want to emphasize:

- Internationalization at Home
- Digitalization of Internationalization
- Regionalization
- TNE Partnerships

Next, I will briefly explore how each future direction may play out in terms of the instruments developed and some of the good practices used. I comment briefly on their benefits, perceived value, and their shortcomings or challenges. This will help us future-proof our internationalization plans at the organizational level.

Internationalization at home

Physical mobilities are no longer taken for granted in the post-pandemic world. There is an awareness that they can be disrupted or suspended at any time in the future due to pandemics, geopolitical conflicts, economic crises, or a global recession. The critique that internationalization based on physical mobilities is not inclusive has now also taken root. IaH is embraced as a way to broaden access to global learning opportunities for all students. This is the perceived value and benefit of IaH. Two common instruments that are being used for IaH are Internationalization of the Curriculum and Campus Diversity. Virtual exchange will be mentioned in the next section under digitalization. This is not an exhaustive list of instruments for IaH but the most commonly used.

Internationalization of the Curriculum entails going back to the learning outcomes at the academic program level and embedding an intercultural, international, and global perspective in the teaching and learning of all students. There is already a multitude of work and scientific studies on this topic (Leask, 2011). It can be challenging, however, to get buy-in from the faculty to set aside the time to do it. Given their research and teaching priorities and other administrative tasks, faculty need to have incentives and tools to engage in internationalization of the curriculum. These can be delivered only by the university leadership. Incentives can be that curriculum internationalization is part of the academic performance evaluation of those faculty who are involved and taking the lead. Tools can be professional development programs, workshops, and preparing compendium of good practices.

The second instrument is to use campus diversity for cross-cultural learning. Creating campus spaces, facilities, extra-curricular activities, and platforms for diverse groups of students to exchange views and work together are the key to this instrument. If there are international students on campus, they are useful resources for intercultural engagement both in and outside of the classroom. Even in

the absence of a large group of international students, there is cultural diversity on or around most campuses in the domestic environment, and opportunities for student engagement with “cultural others” in local society (Jones & Reiffenrath, 2018).

Digitalization of internationalization

Digitalization of internationalization for credit mobility was ongoing before the pandemic. Virtual exchange programs have been conducted since at least 2011; they are defined as “technology-enabled, sustained, people-to-people education programs”, which are “based on students engaging in structured online intercultural dialogue with other learners as part of their regular courses in their home institutions” (O’Dowd & Beelen, 2021). In the United States, Collaborative Online International Learning (COIL) programs were used by many institutions since the early 2000s (SUNY COIL Center, n.d.). There were also many online programs that enrolled international students for degree mobility before the pandemic. When the COVID-19 pandemic stopped physical student mobilities, digital internationalization became the only activity International Offices could engage in for a time. So in lieu of physical study abroad for credit mobility, many universities began to offer virtual mobility programs, opening their online course offerings to the students of their partner institutions, while enrolling their own students in online language courses and credit-bearing courses offered by their partner institutions. Virtual exchange and COIL projects have become widespread, where the whole or part of a course is offered by faculty in different universities in different countries and students are involved in international teamwork and structured discussions.

Virtual mobilities, virtual exchange, and COIL fit nicely within the IaH framework and are useful instruments for it. Even as physical mobilities have restarted, most institutions continue with virtual exchange and COIL projects. Their value is seen in broadening access to global learning and developing the intercultural competences of all students. Also, it is recognized that digitalization reduces the carbon footprint of internationalization and is more environmentally friendly. EU supports the digitalization process via virtual exchange in its Erasmusplus program as a greening tool. There are now workshops, trainings, and conferences dedicated to COIL. Virtual international internships and virtual international company visits are a growing area of interest, in which both learning and employability outcomes can be enhanced for students.

The number of universities offering fully online academic programs for international students is also growing. Universities in the top destination countries that attract large numbers of international students rely on international student fees for their revenue. Therefore, they are keen to develop risk management strategies for when physical mobility of degree-seeking international students may

again be disrupted. Online programs provide an alternative route to international recruitment, and are easily scalable. As reported by World Economic Forum (2022), private providers of online courses are also growing their numbers of online learners, which may turn out to be stiff competition for traditional universities in the future.

The digital divide presents an important challenge to the digitalization of internationalization. Access to hardware, software, and fast, reliable internet connectivity is not equal across the Global North and South (Opp, 2021). We can also see unequal access to digital resources domestically within many countries. Thus, we must ensure that digital internationalization does not replicate the unequal access to global learning opportunities seen in physical student mobilities.

Further research is needed to understand whether virtual mobilities or online learning offer the same level of cultural immersion a student experiences when studying physically abroad. Meanwhile, hybrid programs could present the best of two worlds, or at least provide students the flexibility to choose the format of their studies.

Regionalization

Regionalization began increasing before the pandemic, as more students began choosing to study within the region of their home country. The shift in the geopolitics of the global knowledge economy lags behind this long-term trend, in which universities in Asia and other regions are climbing global rankings and challenging the hegemony of top institutions in the United States or United Kingdom (Baty, 2022). Certainly, with regard to degree mobility, the traditional destination countries, the United States and United Kingdom have lost their dominance in the last decade and more diversification has appeared. For example, China shifted from being the number one country sending students abroad to being a destination country for students, especially from the Asian continent (Wei et al., 2020).

The pandemic has created other reasons for international students to prefer to stay within their region. Public health and safety concerns, uncertainty relating to international travel, lower cost of living, and fear of discrimination in the West are among the many reasons students may choose a study destination closer to home.

The future direction of internationalization in both degree and credit mobility is that regional hubs will continue attracting more international students. For countries like Malaysia and the United Arab Emirates, which already have the infrastructure to be regional higher education hubs, there

are opportunities to grow. It is also possible that new regional hubs will emerge. This will depend on the existing higher education ecosystem and international partnerships and TNE initiatives that can help improve that ecosystem.

The positive take on this trend is to celebrate the diversification of destination countries, hence the more choices students get for international mobility. However, we must also keep the global sustainability framework of the United Nations in mind, and continue growing cross-regional partnerships to ensure students build the global perspective and civic engagement needed to address problems like climate change.

TNE Partnerships

UNESCO and the Council of Europe (2001) define TNE as:

All types of higher education study programs, or sets of courses of study, or educational services (including those of distance education) in which the learners are located in a country different from the one where the awarding institution is based. Such programs may belong to the education system of a State different from the State in which it operates, or may operate independently of any national education system. (QAA, n.d.)

TNE has gone in and out of fashion over the last two decades. But TNE is an important tool for international student recruitment for the universities in destination countries. Especially given the regionalization trend and COVID-19's impact on international students' mobility, the threat of further disruptions and travel restrictions, universities in top destination countries such as the United Kingdom, Australia and the United States have turned their attention to TNE for risk management and in order to retain their revenue from international students.

But what is coming in the post-pandemic era will most likely look different than earlier iterations of TNE. Rather than making huge investments in satellite campuses and professors' travel, the new TNE must take into account the more developed higher education ecosystems and stricter regulations in the host countries. We are beginning to see more micro-campus, degrees delivered in collaboration with local universities and academics, and pathway programs.

British Council (2022) published a report indicating that beyond the economic benefits to the degree-awarding institutions, TNE partnerships are key drivers of the United Nations Sustainable Development Goals. But it is up to the host countries to make sure that TNE partnerships are constructed and implemented in a mutually beneficial, equitable, and ethical way. Local governing

bodies for higher education and institutions of higher education should make sure TNE programs or campuses contribute to capacity building of the local higher education ecosystem, professional development of academic and administrative staff, meaningful research collaborations, and employability skills of students. Another challenge is establishing quality assurance mechanisms to keep up with the growth of TNE programs and their new formats.

If this direction develops further, it is a harbinger of flexible, modular, and stackable international degrees. This could also be combined with the online courses or pathways inherent in the digitalization trend. It is easy to imagine a near future in which international students study for a year or two in their home country, another year or two at a regional hub, an online semester, a virtual internship, a finishing project at the awarding institution, and then getting their degree.

Future-proofing internationalization plans

The following are some recommendations for future-proofing the internationalization plan of higher education institutions in the post-pandemic era.

Internationalization practices must move beyond the International Office and into faculties and departments. Academic staff should be increasingly involved because internationalization at home and of curriculum can only be implemented by being embedded into teaching and learning. The senior academic leadership of the institution must provide incentives and professional development programs for the faculty to revisit the learning outcomes at the academic program level and revise the curriculum to develop the global competences of all students. The United Nations Sustainable Development Goals can provide an effective and practical framework of reference for curriculum updates.

Practical workshops and guidebooks for COIL projects or virtual exchange programs can be prepared for the faculty. The International Office can support the faculty in this process by providing suitable international partnerships and best practices for virtual exchange. International Offices should also look into developing hybrid modes of mobility, combining virtual exchanges with physical study abroad programs. At the institutional level, students who have problems accessing digital resources should be supported by senior leadership.

In general, senior university leadership should plan to develop the ICT skills of the faculty and invest more in educational technologies. There are opportunities for recruitment of more international students to online programs and courses. Online course design and delivery should continue to be improved, building on what was learned during the emergency online learning that took place

during the pandemic. As international degree-seeking students will be looking for more flexibility in the future, hybrid academic programs can be developed, so that a degree-seeking international student can undertake part of their studies online in their home country, and part face-to-face overseas on the campus of the awarding institution.

The regionalization trend suggests that universities should revisit and revise their internationalization plans, and look more closely to regional markets for international marketing and recruitment. They can search for suitable academic partners within their region for student exchanges and academic collaborations.

Creating or expanding mutually beneficial TNE partnerships is an important component of future-proofing internationalization plans. Whether an institution is looking to increase their international student recruitment or trying to retain local student and academic talent, TNE can provide deep and impactful international collaboration opportunities.

In conclusion, internationalization of higher education will remain relevant in the post-pandemic era. There will be more internationalization, but it will look different. Physical student mobility will no longer dominate the field. Fortunately, there are alternative approaches that have already been studied and trialed over the last two decades. We can leverage existing models and good practices to help future-proof our institution's internationalization plans.

References

1. American Council on Education (n.d.). *Comprehensive Internationalization Framework*. <https://www.acenet.edu/Research-Insights/Pages/Internationalization/CIGE-Model-for-Comprehensive-Internationalization.aspx>
2. Baty, P. (2022, October 12). *These are the best universities in the world for 2023 – and the balance is shifting*. World Economic Forum. <https://www.weforum.org/agenda/2022/10/times-higher-education-world-university-rankings-2022>
3. Beelen, J., & Jones, E. (2015). Redefining Internationalization at Home. In A. Curai, L. Matei, R. Pricopie, J. Salmi, & P. Scott (Eds.), *The European Higher Education Area: Between Critical Reflections and Future Policies* (pp. 59-72). Dordrecht: Springer.
4. British Council. (2022, November 1). *Scale of higher education transnational education 2020-21*. <https://www.britishcouncil.org/scale-higher-education-transnational-education-2020-21>
5. EUROSTUDENT (n.d.). *INTELLIGENCE BRIEF NO. 02 | 2016: What are the Obstacles to Student Mobility during the Decision and Planning Phase?* https://www.eurostudent.eu/download_files/documents/EV_IB_mobility_obstacles.pdf
6. Hudzik, J. (2011). *Comprehensive internationalization: From concept to action*. Washington: NAFSA.
7. Jones, E., & Reiffenrath, T. (2018, August 21). *Internationalisation at Home in practice*. EAIE. <https://www.eaie.org/blog/internationalisation-at-home-practice.html>
8. Knight, J. (2003). Updated Definition of Internationalization. *International Higher Education*, (33). <https://doi.org/10.6017/ihe.2003.33.7391>
9. Leask, B. (2013). Internationalization of the Curriculum and the Disciplines: Current Perspectives and Directions for the Future. *Journal of Studies in International Education*, 17(2), 99–102. <https://doi.org/10.1177/1028315313486228>
10. Lepori, B. (n.d.). *What ETER tells us about student mobility in European higher education*. ETER European Tertiary Education Register. <https://www.eter-project.com/>
11. Marinoni, G., Egron-Polak, E., & Green, M. (2019, February 1). A changing view of the benefits of HE internationalisation. *University World News*.
12. O'Dowd, R., & Beelen, J. (2021, September 7). *Virtual exchange and Internationalisation at Home: Navigating the terminology*. EAIE. <https://www.eaie.org/blog/virtual-exchange-iah-terminology.html>

13. OECD (n.d.). PISA 2018 Global Competence. <https://www.oecd.org/pisa/innovation/global-competence/>
14. Olson, C. L., Green, M. F., & Hill, B. A. (2006). *A Handbook for Advancing Comprehensive Internationalization: What Institutions Can Do and What Students Should Learn*. American Council on Education.
15. Opp, R. (2021, July 14). *The evolving digital divide*. UNDP. https://www.undp.org/blog/evolving-digital-divide?utm_source=EN&utm_medium=GSR&utm_content=US_UNDP_PaidSearch_Brand_English&utm_campaign=CENTRAL&c_src=CENTRAL&c_src2=GSR&gclid=CjwKCAiAnZCdBhBmEiwA8nDQxTxv6bbJw0D9CxpMW83suW6--tspr2s5JvBWuE0l6l5tdAhbf3fp1xoCxZkQAvD_BwE
16. QAA (n.d.). TRANSNATIONAL EDUCATION. <https://www.qaa.ac.uk/international/transnational-education>
17. Sabzalieva, E., Mutize , T., & Yerovi , C. (2022). *Moving minds: Opportunities and challenges for virtual student mobility in a post-pandemic world*. UNESCO.
18. SUNY COIL Center. (n.d.). *Collaborative Online International Learning (COIL)*. <https://coil.suny.edu/>
19. Wei, Gao & Lin, Wang & Jingdong, Yan & Yanxiong, Wu. (2020). China as a Global Destination for International Students. *Journal of Politics and Law*. 13. 135. 10.5539/jpl.v13n1p135.
20. World Economic Forum. (2022, January 27). *These 3 charts show the global growth in online learning*. <https://www.weforum.org/agenda/2022/01/online-learning-courses-reskill-skills-gap/>

How can Higher Education Institutions Support a Future-Proof Economy?

Maciej Markowski, European Union Agency for Asylum

Abstract

This paper discusses the challenges higher education institutions must address to remain relevant actors that support future economic and social development. In this paper, universities and their surrounding environments are analyzed using the volatility, uncertainty, complexity, and ambiguity (VUCA) world terminology and approach. Within the VUCA action framework, possible ways forward for higher education institutions are explored based on verifiable practical examples and good practices and methodologies described in relevant scientific literature as well as other sources. This paper aims to provide an overview of possible starting points for higher education institutions facing the challenges of a VUCA world. Starting points can include focusing on institutional strategic vision and orientation, shaping educational opportunities and experience based on student needs, improving clarity of communication and relationships with stakeholders, and agility and innovation in engaging universities' full educational potential.

A paradigm shift for higher education institutions: new roles and responsibilities

Universities¹⁰ are institutions that have been an important factor in the development of societies, nations, and humanity for centuries. Since the beginning, their primary role has been the creation and transfer of knowledge. Knowledge transfer has always been both horizontal (between generations of masters and students) and vertical (from scholars through educated graduates to the wider society). Universities' mission was to educate the next generation of leaders and societal elite, and to contribute to the advancement of knowledge through research. Universities were also cradles of intellectual and cultural exchange, where ideas and perspectives could be debated.

This basic function of higher education has remained unchanged, although both the content and forms of dissemination of knowledge have changed over time. At the same time, much has changed in the organization and functioning of higher education institutions and their environments, including organizational structures and forms, funding schemes and mechanisms, relationship with

¹⁰ In different countries and education systems, there might be specific requirements, or cultural and traditional circumstances, based on which more specific definitions of various types of institutions are introduced to describe "universities", "universities of applied sciences", "alternative providers", etc. However, in this article the term „universities“ is used interchangeably with "higher education institutions".

stakeholders, and the development and evolution of different models. Higher education institutions are likely to face new challenges in the present and the foreseeable future, including:

- Unparalleled quantitative increases in the number of higher education institutions – from approximately 60,000 worldwide in 2006 to almost 90,000 in 2018 (HESA, 2022).
- Exponential growth in the number of students – from 13 million in 1960 (World Statistical Outlook on Higher Education, 1998) to 235 million in 2020 (UNESCO Higher Education Global Data Report, 2022).
- Growing diversity of higher education institutions types and raise of alternative providers (i.e. online providers, corporate universities).
- Increasing competition for students, academic staff, and funding due to mobility and globalization processes (Mense et al., 2018).
- New teaching and learning approaches and methods (i.e. online, project-based learning, competency-based education, work-based learning) (Hoidn & Kärkkäinen, 2014).
- Rise of non-traditional modes of delivery and certification of achieved learning (i.e., micro-credentials) (Wheelahan & Moodie, 2022).
- Changes of modes of institutional governance towards more efficient use of available resources (Boer & Huisman, 2021).

However, the most significant changes are not happening within the higher education sector itself, but in its direct environment. Societal expectations of higher education institutions are evolving more rapidly than ever before, and are articulated more and more directly and explicitly. In just the last 10-15 years, expectations of universities have expanded beyond traditional research and education and now include:

- Contributing towards the green economy, sustainable development, and social responsibility (Chankseliani & McCowan, 2021).
- Adaptation towards labor market needs and graduates' employability (Okolie et al., 2019).
- Raising entrepreneurial talents and innovation (Kottmann et al., 2021).
- Internationalization (Huang et al., 2022).
- Decreasing, or even negative premium on higher education (KPMG International, 2020).

The above list can be further expanded and to include numerous external factors that are already shaping the higher education industry, like rankings, demography, scarcity of resources and funding, rapid development of technology, and other social trends. All those factors lead to one conclusion: that the days when universities could be ivory towers are long gone. In order to remain relevant, they need to evolve and become irreplaceable support for societies, economies, and states in successfully overcoming future challenges.

VUCA environment and VUCA response

All trends, circumstances, and factors shaping the reality of higher education institutions can be summarized with one term: “VUCA world”. VUCA is a term describing the reality and environment of more and more industries and organizations, regardless of their nature, ownership, geographical location, or cultural origins (Schick et al., 2017). According to Bennett & Lemoine (2014) the acronym stands for :

- **Volatility:** relatively unstable change, where information is available and the situation is understandable, but change is frequent and sometimes unpredictable.
- **Uncertainty:** a lack of knowledge as to whether an event will have meaningful ramifications; cause and effect are understood, but it is unknown if an event will create significant change.
- **Complexity:** Many interconnected parts forming an elaborate network of information and procedures; often multiform and convoluted, but not necessarily involving change.
- **Ambiguity:** a lack of knowledge as to “the basic rules of the game”; cause and effect are not understood and there is no precedent for making predictions as to what to expect.

Analyzing the environment of modern higher education institutions, VUCA-type challenges can be easily identified. In particular, those relevant to the universities’ ability to support future-proof economy are:

- Rapid changes in the global and local labor markets raise questions as to the relevance of traditional study programs, as seemingly inadequate for labor market expectations.
- The shift from teacher-centric transmission of knowledge to developing transversal skills and competencies requires changes in delivery methods and pedagogies to enable and facilitate students learning.
- Global mobility enables swift movement of people, increasing competition among universities for students, staff, funding opportunities, etc.
- Alternative and online providers offer more accessible and individualized education.
- Rapid technological development makes the research and innovation mission of universities more challenging and risky.
- Growing pressure on quick results and academic achievements coupled with the availability of technologies like artificial intelligence (Bates et al., 2020) increase the possibility of academic misconduct and fraud.
- Growing need for lifelong learning among already highly qualified professionals and increasing demand for upskilling and reskilling of labor forces raises expectations of diverse learning opportunities.

- Decreasing premium on university degrees and examples of successful entrepreneurs or influencers without higher education raises questions regarding the positive correlation between general life success, prosperity, and higher education among potential university candidates.

VUCA environments, while caused by country-wide or global trends, are very challenging for organizations and individuals. This is due in part to the need for accurate and timely responses to those challenges to come from within individual organizations. Analysis of the impact of the VUCA environment on higher education ordinarily concludes with a very accurate diagnosis (Waller et al., 2019): “each institution must design its own future and how to best adjust and adapt to their individual circumstances. Not all institutions can respond in the identical way.”

The necessity for tailoring individual and institutional responses for global challenges is caused by the great variety and diversity of universities, and their individual situation and context. Therefore, even within single higher education systems, it is impossible to design one-size-fits-all solution to meet the challenges of the VUCA world.

In order to remain relevant and support future economies and societies, higher education should re-evaluate their strategic and operational approaches. Inspiration can be taken based on practices and examples of other industries facing similar challenges. Research analysis based on practical experience provides several possible frameworks and tailored solutions (Dhillon & Nguyen, 2020). One framework seems most fitting for the higher education environment. The VUCA action framework described by Codreanu (2016) proposes the following response to VUCA world challenges):

VUCA challenge	VUCA action framework response	Description
Volatility	Vision	Vision is about identifying the key priorities that matter most and which, if approached, “start to shift, dislodge and remake other patterns.”
Uncertainty	Understanding	Openness; accountability; setting boundaries through clear expectations and objectives; willingness to tackle tough issues.

VUCA challenge	VUCA action framework response	Description
Complexity	Clarity	Clarity is the opposite of simplicity and certainty. It is more about direction, rather than about the end point, and it incurs “great flexibility about the detail”.
Ambiguity	Agility	Agility is about withstanding difficulties by changing in a flexible and swift manner

Source: (Codreanu, 2016)

Overall, the VUCA environment requires higher education institutions to become more proactive rather than reactive. This includes creating new product-market arenas not yet recognized or actively exploited by others (Covin & Miles, 1999).

Universities in the VUCA world

Higher education institutions can develop their unique strategic response to modern challenges based on Codreanu’s (2016) VUCA Action Framework.

From volatility to vision

There are many definitions of “vision”, and descriptions of its role in modern organizations and institutions. It can vary from a technocratic statement of a “fundamental, ambitious sense of purpose, one to be pursued over many years” (Kantabutra & Avery, 2010) to a very inspirational set of aspirations, hopes and goals aimed at changing an unacceptable status quo (Conger & Kanungo, 1987). The main role of a vision statement is to clarify the purpose and highlight the uniqueness of an organization (Berson et al., 2001).

In order to develop an appropriate vision for a higher education institution, it is necessary to consider a set of circumstances and factors that are unique for every university. There are many different approaches to determining the key strategic decisions shaping the future of a higher education institution (Fumasoli et al., 2020). Potential questions to ask are included in Box 1.

Box 1. Six questions to consider in relation to the strategic direction of a higher education institution

- Is our outreach and impact global, national, or regional?
- Who are our stakeholders and how can they support us?
- Is our approach to education research-oriented or vocational?
- Are our programs specialized and focused or general and broad?
- What is our unique added value that can be a source of our competitive advantage?
- Which challenges of our environment are we able to respond to?

However, it is also important to take into consideration the practical use and realization of the vision. Therefore, the vision should be optimistic, desirable, challenging, clear, brief, and achievable (Ruvio et al., 2010). This means that higher education institutions should build their vision with its practical implementation in mind. A vision that is overly optimistic, too easy, or unachievable with the institution's resources or timeframe, might not fulfill its main role and purpose.

Developing a university's vision for the VUCA world might also be a part of a larger strategic renewal, resulting in creating a unique business model. This term became very popular in the world of start-ups and innovation because of its practical operationalization in the form of the business model canvas (Osterwalder & Pigneur, 2009). In its essence, a business model is a conceptual model of logic behind creating and delivering value to customers of any organization. It reflects management's understanding of customers' needs, preferable delivery methods, and how organizations can meet those needs and get rewarded for the delivered value (Teece, 2010). The idea of a business model is present in the world of higher education in reference to commercialization of research (Mets, 2010). Therefore, it can be adapted and expanded to other areas of universities' operations.

Defining a vision for any institution is the responsibility of its top leadership, with active participation and support of its stakeholders. Therefore, the role of leaders capable of navigating in the complex and uncertain world of modern and future higher education becomes more and more essential. This also includes the ability to make use of available data, as well as making difficult decisions, and can result in more effective responses to the VUCA challenges.

From uncertainty to understanding

Students themselves are one of the most significant changes in higher education institutions. As mentioned earlier, the student body is becoming more and more diverse. Due to the increasing importance of lifelong learning in career progression, and the need for upskilling and reskilling of labor, the demand for the education provided by universities is becoming more significant among

active professionals. Understanding the different needs of diverse groups and types of students can become a key success factor for universities to effectively support the future-proof economy.

First of all, it is necessary to distinguish two main categories of students: those with no prior higher education experience (usually 18-20 years old) and those who are already professionally active and are seeking further personal and professional development opportunities. These two groups have significantly different needs and expectations towards almost every aspect of their university experience. This includes not only the content of their program, but also its mode of delivery, and communication and learning styles. See Table 1 for more.:

Table 1: Preferences and approaches of different generations

	Baby boomers	Gen X	Millennials	Gen Z
Preferred career	Usually in one company with clear mobility paths	Work-life balance Personal interests	Flexibility and mobility Seeking challenges and impact	Multitasking and self-directing Stability and work-life balance
Technology	Early adopters	Digital immigrants	Digital natives	Real world and virtual reality are interwoven
Preferred communication	Face to face Phone calls	Face to face E-mails Text messages	E-mails Text messages Social media	Direct messages Social media
Dominant technology	Television	Personal computer	Smartphone Tablet	Smartphone Wearables

Source: Own compilation (Barhate & Dirani, 2022; Benítez-Márquez et al., 2022; Haynes, 2011; Mahmoud et al., 2021; Prensky, 2001; Purdue University, 2019).

It follows that these different generational approaches to communication, career, professional life, and personal development would also affect expectations towards universities and learning styles. Higher education institutions need to understand the differences between generations to address them most effectively. This means tailoring their educational offer for different target audiences. Educational programs for Gen Z would be designed differently than lifelong learning opportunities for older generations who are already professionally active. Channels of promoting of the educational offerings and daily communications with enrolled students would also differ.

Moreover, following the emerging trends and technologies relevant in our changing world, and providing dedicated learning opportunities fit for various target audiences would better prepare the graduates of the future. The relevance of graduates' education in their professional success could result in them seeking further learning from their *alma mater*. There is already a mismatch of demand for lifelong learning opportunities and supply provided by higher education institutions (Carrington Crisp & EFMD Global, 2022).

From complexity to clarity

Complexity of the modern and future world is a challenge not only for higher education institutions but also for their key stakeholders: prospective and current students, faculty, business world partners, or society. Making responsible decisions regarding the choice of education is more and more difficult in the world of global competition. Therefore, in this ambiguous and complex environment, effective collaboration and communication are key to successful navigation and avoidance of possible pitfalls. Higher education institutions have an ethical obligation to provide accurate and precise information regarding their programs and their quality. This should enable their stakeholders in making informed and responsible decisions, which would have paramount impact on their future lives.

Clear and precise communication should help build realistic expectations of stakeholders towards the higher education institution. This in turn fosters trust and ensures mutually beneficial future relations. Naturally, the communication must be in line with the university's vision, and tailored to their target audiences. To foster credibility and trust, institutions can emphasize their unique and distinctive features, supported by credible confirmations through specialized external quality assurance and accreditation services. Prospective and current students should be clearly informed as to what knowledge, skills, and competencies they will develop by completing a degree program or learning activity, including potential future career paths and possibilities. When setting the future vision and strategic direction of the university, faculty should be involved as much as possible, and at least informed, enabling them to shape their professional development accordingly. Industry partners should be involved in the design and delivery of study programs and other learning opportunities to ensure their alignment with labor market needs and expectations. This could result in applied research or other collaborative projects or initiatives. Such university-industry cooperation and partnership can take a variety of forms, but should in any case be formed based on open and clear mutual relations through effective and efficient communication measures

From Ambiguity to Agility

Decision-making in a volatile and ambiguous environment is particularly difficult for large and highly complex organizations like higher education institutions. Moreover, the fast pace of changes in the modern world makes long term planning additionally challenging. On the other hand, universities often have quite significant organizational inertia, due to factors that are not always easy or possible to influence. For example, there are limited possibilities to quickly change study programs. Results of these changes are only fully visible after students' completion 2, 3 or even 5 years from enrollment. This makes implementation of planned improvements a long and burdensome process, which sometimes results in the perception of purposeful delay of inevitable changes. On the other hand, the expectations of labor market actors and other stakeholders usually include imprecise requirements of tangible results that are rapidly visible. Sometimes these expectations are contradictory or mutually exclusive, particularly when it comes to subject-specific content; they can include a very wide and extensive list of transversal skills necessary for future professional success (Dondi et al., 2021).

To foster compromise, universities can introduce innovation and creativity culture among all internal university stakeholders in an effort to generate new ideas and solutions and enable institutions to face upcoming challenges.

The first source of organizational agility in the area of education is provided by the growing importance of micro-credentials or alternative credentials. This phenomenon is very diverse and not yet fully defined. It offers significant opportunities for higher education institutions to provide fit-for-purpose education in a more flexible and agile manner (Kato et al., 2020). The strategic change that micro-credentials could bring is already visible. However, doubts remain of their fitness for university-type education (McGreal & Olcott, 2022). In some educational systems there are already attempts to regulate micro-credentials by defining them and setting requirements for inclusion into national systems of quality assurance and qualification recognition, which should enable their stackability into larger degrees (Council of the European Union, 2022). Introducing the concept of microcredentials into regular university practice could result in more labor-market oriented fit-for-purpose learning opportunities for different target audiences.

Furthermore, universities have a great potential to support students' personal and professional personal growth and development by acquiring transversal skills. This could be achieved by introducing more opportunities for interdisciplinary cooperation using problem or project-based learning methodologies. This could be achieved by organizing courses or extracurricular activities

that place students from different programs into groups to solve real-life problems with the support of a dedicated tutor. Interdisciplinary approaches enable students to work on challenges beyond their subject = and learn to work in diverse, and possibly international, groups. This would also be a great opportunity for the inclusion of industry partners, which would provide students with additional learning and networking opportunities.

Finally, universities should foster innovation in education among their faculty, in particular those engaged in classic programs, courses, and research, which might seem outdated or impractical. Providing support for a future-proof economy does not always mean following disruptive trends or technologies. Many new, high-tech industries require expertise from diverse areas of knowledge. Higher education institutions should create space to explore these seemingly unusual applications of classical topics. Examples include: the use of history and literature studies in scriptwriting for the gaming industry, cognitive studies for shaping interactions between users and products in UX design, or cultural studies for successful marketing campaigns.

Conclusion

Higher education institutions are unquestionably entering a time of disruptive and turbulent changes. The new reality can be described as a VUCA world, where a volatile, uncertain, complex, and ambiguous environment shapes the conditions of every university. The response to such complex and rapidly changing conditions is primarily the responsibility of individual higher education institutions, as system-wide solutions are unlikely to be flexible enough. Therefore, each higher education institution should take more and more responsibility for its future success and relevance in support of economic and social development. This article provided one of many frameworks outlining possible approaches for institutional response. Future research might provide more examples of effective solutions for the challenges of the VUCA environment by addressing institutional adaptations and shifts in strategic orientation, operational excellence, and agility.

References

1. Barhate, B., & Dirani, K. M. (2022). Career aspirations of generation Z: a systematic literature review. *European Journal of Training and Development*, 46(1–2), 139–157. <https://doi.org/10.1108/EJTD-07-2020-0124>
2. Bates, T., Cobo, C., Mariño, O., & Wheeler, S. (2020). Can artificial intelligence transform higher education? *International Journal of Educational Technology in Higher Education*, 17(1). <https://doi.org/10.1186/s41239-020-00218-x>
3. Benítez-Márquez, M. D., Sánchez-Teba, E. M., Bermúdez-González, G., & Núñez-Rydman, E. S. (2022). Generation Z Within the Workforce and in the Workplace: A Bibliometric Analysis. *Frontiers in Psychology*, 12(February), 1–16. <https://doi.org/10.3389/fpsyg.2021.736820>
4. Bennett, N., & Lemoine, G. J. (2014). What a difference a word makes: Understanding threats to performance in a VUCA world. *Business Horizons*, 57(3), 311–317. <https://doi.org/10.1016/j.bushor.2014.01.001>
5. Berson, Y., Shamir, B., Avolio, B. J., & Popper, M. (2001). The relationship between vision strength, leadership style, and context. *Leadership Quarterly*, 12(1), 53–73. [https://doi.org/10.1016/S1048-9843\(01\)00064-9](https://doi.org/10.1016/S1048-9843(01)00064-9)
6. Boer, H. de, & Huisman, J. (2021). Governance Trends in European Higher Education. In G. Capano & D. S. L. Jarvis (Eds.), *Convergence and Diversity in the Governance of Higher Education. Comparative Perspectives*. (pp. 333–354). Cambridge Studies in Comparative Public Policy.
7. Carrington Crisp, & EFMD Global. (2022). *Alumni Matters*.
8. Chankseliani, M., & McCowan, T. (2021). Higher education and the Sustainable Development Goals. *Higher Education*, 81(1), 1–8. <https://doi.org/10.1007/s10734-020-00652-w>
9. Codreanu, A. (2016). A VUCA action framework for a VUCA environment. Leadership challenges and solutions. *Journal of Defense Resources Management*, 7(2).
10. Conger, J. A., & Kanungo, R. N. (1987). Toward a Behavioral Theory of Charismatic Leadership in Organizational Settings. *Academy of Management Review*, 12(4), 637–647. <https://doi.org/10.5465/amr.1987.4306715>
11. Council of the European Union. (2022). *Proposal for a Council recommendation on a European approach to micro-credentials for lifelong learning and employability*. 2022(May), 1–34.
12. Covin, J. G., & Miles, M. P. (1999). Corporate entrepreneurship and the pursuit of competitive advantage. *Entrepreneurship Theory and Practice*, 23(3), 47–64. <http://ecite.utas.edu.au/68600/1/Corporate-Entrepreneurship-and-the-pursuit-of-competitive-advantage.pdf>

13. Dhillon, R., & Nguyen, Q. C. (2020). Strategies to Respond to a VUCA World. In *Department of Business Administration BUSQ01 Strategic Thinking* (Issue Autumn).
14. Dondi, M., Klier, J., Panier, F., & Schubert, J. (2021). *Defining the skills citizens will need in the future world of work*. <https://www.mckinsey.com/industries/public-and-social-sector/our-insights/defining-the-skills-citizens-will-need-in-the-future-world-of-work>
15. Fumasoli, T., Barbato, G., & Turri, M. (2020). The determinants of university strategic positioning: a reappraisal of the organisation. *Higher Education*, 80(2), 305–334. <https://doi.org/10.1007/s10734-019-00481-6>
16. Haynes, B. P. (2011). The impact of generational differences on the workplace. *Journal of Corporate Real Estate*, 13(2), 98–108. <https://doi.org/10.1108/14630011111136812>
17. HESA. (2022). *World Higher Education: Institutions, Students and Funding 2022*. www.higheredstrategy.com
18. Hoidn, S., & Kärkkäinen, K. (2014). Promoting Skills for Innovation in Higher Education. *OECD Education Working Papers*, 100, 0_1,1,5-61. <http://www.oecd-ilibrary.org/%5Cnjsessionid=6gr92e8q2uu33.x-oecd-live-01content/workingpaper/5k3tsj67l226-en>
19. Huang, F., Crăciun, D., & de Wit, H. (2022). Internationalization of higher education in a post-pandemic world: Challenges and responses. *Higher Education Quarterly*, 76(2), 203–212. <https://doi.org/10.1111/hequ.12392>
20. Kantabutra, S., & Avery, G. C. (2010). The power of vision: Statements that resonate. *Journal of Business Strategy*, 31(1), 37–45. <https://doi.org/10.1108/02756661011012769>
21. Kato, S., Galán-Muros, V., & Weko, T. (2020). *The Emergence of Alternative Credentials* (No. 216; OECD Education Working Paper).
22. Kottmann, A., Dix, G., & Jongbloed, B. (2021). *Literature Review. Changing a university towards entrepreneurialism: Inspiring transformation in higher education institutions* (Issue November).
23. KPMG International. (2020). *The future of higher education in a disruptive world*.
24. Mahmoud, A. B., Fuxman, L., Mohr, I., Reisel, W. D., & Grigoriou, N. (2021). “We aren’t your reincarnation!” workplace motivation across X, Y and Z generations. *International Journal of Manpower*, 42(1), 193–209. <https://doi.org/10.1108/IJM-09-2019-0448>
25. McGreal, R., & Olcott, D. (2022). A strategic reset: micro-credentials for higher education leaders. *Smart Learning Environments*, 9(1), 1–23. <https://doi.org/10.1186/s40561-022-00190-1>

26. Mense, E. G., Lemoine, P. A., Garretson, C. J., & Richardson, M. D. (2018). The Development of Global Higher Education in a World of Transformation. *Journal of Education and Development*, 2(3), 47. <https://doi.org/10.20849/jed.v2i3.529>
27. Mets, T. (2010). Entrepreneurial Business Model for Classical Research University. *Commerce of Engineering Decisions*, 21(1), 80–89.
28. Okolie, U. C., Nwosu, H. E., & Mlanga, S. (2019). Graduate employability: How the higher education institutions can meet the demand of the labour market. *Higher Education, Skills and Work-Based Learning*, 9(4), 620–636. <https://doi.org/10.1108/HESWBL-09-2018-0089>
29. Osterwalder, A., & Pigneur, Y. (2009). *Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers*. <https://doi.org/10.1523/JNEUROSCI.0307-10.2010>
30. Prensky, M. (2001). Digital Natives, Digital Immigrants Part 1. *On the Horizon*, 9(5), 1–6. <https://doi.org/10.1108/10748120110424816>
31. Purdue University. (2019). *No Title*. Generational Differences in the Workplace. <https://www.purdueglobal.edu/education-partnerships/generational-workforce-differences-infographic/>
32. Ruvio, A., Rosenblatt, Z., & Hertz-Lazarowitz, R. (2010). Entrepreneurial leadership vision in nonprofit vs. for-profit organizations. *The Leadership Quarterly*, 21(1), 144–158. <https://doi.org/10.1016/j.leaqua.2009.10.011>
33. Schick, A., Hobson, P. R., & Ibsch, P. L. (2017). Conservation and sustainable development in a VUCA world: the need for a systemic and ecosystem based approach. *Ecosystem Health and Sustainability*, 3(4). <https://doi.org/10.1002/ehs2.1267>
34. Teece, D. J. (2010). Business Models, Business Strategy and Innovation. *Long Range Planning*, 43(2–3), 172–194. <https://doi.org/10.1016/j.lrp.2009.07.003>
35. UNESCO Higher Education Global Data Report (Issue May). (2022).
36. Waller, R. E., Lemoine, P. A., Mense, E. G., Garretson, C. J., & Richardson, M. D. (2019). Global Higher Education in a VUCA World: Concerns and Projections. *Journal of Education and Development*, 3(2), 73. <https://doi.org/10.20849/jed.v3i2.613>
37. Wheelahan, L., & Moodie, G. (2022). Gig qualifications for the gig economy: micro-credentials and the ‘hungry mile’. *Higher Education*, 83(6), 1279–1295. <https://doi.org/10.1007/s10734-021-00742-3>
38. *World statistical outlook on higher education* (Issue October). (1998).

Accreditation's Role in United States Higher Education

Jan Friis, Senior Vice President for Government Affairs Council for Higher Education Accreditation

Abstract

A cornerstone of higher education quality in the United States (U.S.) is and has been the accreditation of institutions and programs by independent, nongovernmental accrediting organizations. This paper will describe the history and purpose of accreditation; how accreditation operates in the U.S.; the roles of the federal government, states and accrediting organizations in quality assurance; and the challenges accreditation faces in the 21st Century. While this will not be a comprehensive view of accreditation, it provides information that may be applicable for other countries as they consider the ways in which quality assurance can advance the quality of higher education and continuous improvement thereof.

Accreditation in the U.S.

The formal accreditation of higher education institutions has been in existence for more than 125 years. Accreditation organizations were formed by members of the academic community to provide an external review of the quality of institutions, to assure that they were meeting standards set by the accrediting organization for educational and institutional quality. From the beginning, accreditors also focused on the continuous improvement of quality, so that institutions met the evolving needs of students and society. These accrediting organizations fell into four general categories:

1. Regional accrediting organizations, which accredit institutions within specific geographic regions. These are the oldest category of accreditors.
2. Career-related accrediting organizations, which focus on institutions and programs that provide technical training, often in specific fields.
3. Faith-related accrediting organizations, which focus on institutions that are affiliated with a specific religion or provide training for religious vocations.
4. Programmatic accrediting organizations, which focus on programs of study in specific fields.

The first regional accrediting organization was established in 1885 in New England. Others followed, until there were seven regional accrediting organizations established. For many years, these regional accrediting organizations focused on accrediting institutions in specific geographical regions of the U.S.. In 2020, the U.S. Department of Education (USDE) dropped the geographic-scope designation, permitting accreditors to work with institutions throughout the country, and in some cases overseas).

Other accrediting organizations were established to serve faith-related institutions, career-related institutions, and specific programs of study. In 2023, there were more than 70 “recognized” U.S. accrediting organizations reviewed by the Council for Higher Education Accreditation (CHEA), the USDE, or both.

Accreditation as a means for the academy to ensure its own quality

From the beginning, U.S. higher education aimed to ensure that quality was overseen by the academy, rather than the government due to the belief that higher education itself was the expert on defining and reviewing quality as well as providing guidance on ways to improve academic and institutional quality and performance.

Higher education accreditation, in addition to reviewing institutions and program, also has the purpose of being an advocate for and protector of:

- Institutional mission.
- Institutional autonomy.
- Academic freedom.
- Peer review.

The importance of each of these foci will be discussed later in this paper.

The recognition of accrediting organizations

“Recognition” is the term used for the review and affirmation of the quality of institutional and programmatic accreditors. The academy established this recognition function as a way of “accrediting the accreditors.” These included several predecessor groups to CHEA, including:

- The Federation of Regional Accrediting Commissions of Higher Education (FRACHE).
- The National Commission on Accrediting (NCA).
- The Council on Postsecondary Accreditation (COPA).
- The Commission on Recognition of Postsecondary Accreditation (CORPA).

The Council for Higher Education Accreditation

The CHEA was established in 1996 following a referendum of college and university presidents after COPA and CORPA were disbanded in the early 1990s.

CHEA’s purpose is to assure accreditation’s quality and focus on academic quality and institutional improvement. This review, while at the behest of the academy, is independent of the institution,

program, or accrediting organization. CHEA is a nonprofit, and the only nongovernmental association in the United States focused exclusively on higher education accreditation and the recognition of accrediting organizations. At the end of 2022, approximately 1,900 members, colleges, and universities accredited by recognized U.S. accrediting organizations under CHEA. These institutions are of all sizes and are spread throughout the United States, but are all degree-granting institutions, as specified in CHEA's bylaws.

CHEA is governed by a 20-member board made up of college and university presidents, institutional representatives, and members of the public. Board members set policies and oversee operations for CHEA, and approve or disapprove recommendations to begin, continue, or discontinue the recognition of various accrediting organizations. These recommendations are made by the CHEA Committee on Recognition, composed of volunteers from institutions and accrediting organizations. CHEA began formal recognition of accrediting organizations in 1999, and currently recognizes 60+ institutional and program accrediting organizations. It is important to note that CHEA is not connected to and does not receive any funds from the federal government. CHEA is an independent organization with separate recognition decisions from those of the USDE.

United States Department of Education

The U.S. government became increasingly involved in accreditation following the decision to underwrite higher education for Korean War veterans. This was first evidenced by legislation called the G.I. Bill, which went into effect in the early 1950s. Regulations were set for accrediting organizations to act as gatekeepers for government funds. A one-page list of areas for accreditors to review was provided to affirm that the institutions and programs were legitimate and provided quality higher education.

Federal involvement increased following the passage of the Higher Education Act in 1965 and the establishment of the USDE in 1980; higher education was formerly overseen by other Cabinet-level departments.

The U.S. Government began formal recognition of accrediting organizations following the passage of the Higher Education Act in 1965. The government, in expanding its role in higher education funding, felt it was necessary to set standards to measure the effectiveness of accrediting organizations in their role as gatekeepers for government funds.

An accreditation unit housed within the USDE reviews accrediting organizations and provides reports to the National Advisory Committee on Institutional Quality and Integrity (NACIQI). This committee is appointed by the Department and by Congress, and is made up of representatives from higher education, accreditation, and the public. NACIQI reviews reports on accrediting organizations and provides recommendations on their recognition to the Secretary of Education. However, the Department is not bound to follow their recommendations.

Over time, USDE has added more requirements for accreditors. In practical terms, USDE reaches institutions through accreditors via its regulations. Government requirements have now grown from a one-page directive to ten pages of statutes, 30 pages of regulations, and 37 pages in a guidebook, as well as additional guidance from the U.S. Department of Education.

The Academy

The idea behind U.S. accreditation was clear from the beginning: institutions wanted to maintain control over higher education and academic quality control, rather than have the government set quality standards. This was achieved by having independent accrediting organizations – not the government – oversee academic quality, institutional performance and improvement, and student outcomes.

The rationale for having accreditation directed by the academy is that those working in and for higher education are the experts on how higher education operates and might improve. Government, while expert at overseeing its own regulations, is not well-equipped to maintain a staff with expertise in all areas of higher education. Meanwhile, those individuals work in and for higher education.

There are currently more than 3,000 degree-granting higher education institutions in the United States, and more than 20,000 accredited programs of study. Each of the regional accrediting organizations certifies hundreds of colleges and universities. These accreditors rely on volunteers from the academy to serve as peer reviewers. In this way, institutions review other institutions and programs review other programs, with funding from the academy itself. Simply put, there is no way that the government could handle the volume of work – much of it voluntary – that goes into the review and accreditation of U.S. higher education institutions and programs.

Accrediting organizations are overseen by the U.S. government with a focus on their fitness as gatekeepers for government funding, and by CHEA, as an independent organization.

Advocating For and Protecting Features of Higher Education

CHEA's work reflects the academy's desire that certain features of U.S. higher education be protected and maintained, including:

Table 1. Feature of U.S. Higher Education

Feature of U.S. Higher Education	Description
Institutional Mission	Various institutions have varying missions. A one-size-fits-all approach to institutions' mission would not work in a nation characterized by a diverse student population and diversity of institutions actively working to meet the educational needs of students and society. This aims to ensure that there is a "ubiquity of access," meaning that the largest number of students and potential students have access to higher education that will meet their individual needs.
Institutional autonomy	The ability of each institution to determine its own academic offerings and to employ innovative approaches to education and institutional operations is an important facet of assuring higher education quality in the United States. No two institutions are entirely alike in the students they serve or the education they offer. Institutional autonomy means that colleges and universities can make changes or expand offerings to best meet the needs of students and society.

Feature of U.S. Higher Education	Description
Academic freedom	Academic freedom is a cornerstone of U.S. higher education. Protecting academic freedom is an important feature of accreditation in the United States. Without the freedom to make academic inquiries or espouse a range of ideas, institutions cannot advance the quality of their educational offerings. The aim is to ensure that educators teach to the highest academic quality standards and are not forced to conform to non-academic pressures.
Peer review	Peer review – the review and judgment of institutions by their peers – is an integral feature of U.S. higher education, and a key feature to quality assessment. Peer review is integral to fields like medicine, where experts review the work of other experts and affirm findings or suggest changes. This approach is key to advancing academic and institutional quality and improvement, which in turn enables institutions and programs to meet the evolving needs of students.

Additionally, accreditors and institutions work to advance the transparency and accountability of institutions and programs. Students, potential students, parents, and the public have a right to information about how well an institution or program is performing and how its students fare after completing their course of study. In recent years, greater transparency has become a key feature of accredited institutions and programs and of the accrediting organizations themselves, to support the public to understand the basis for accrediting decisions. Transparency and accountability are being challenged by some in government, as well as by some think tanks.

The Impact of CHEA and USDE recognition on student success

USDE's regulations governing the recognition of accrediting organizations have grown dramatically since they were first established. They continue to expand, with an emphasis on ensuring compliance from accreditors, as well as by the institutions and programs they accredit. The laws governing accreditation have also expanded, particularly the Higher Education Act, which was first passed in 1965. This law is periodically reauthorized. The last reauthorization in 2008 changed government policy toward accreditation significantly, making it more focused on compliance with regulations.

Government funds for students have grown substantially since they were first introduced in the 1950s. Two primary examples of government funding for students are:

1. Pell Grants: grants of several thousand dollars to students who qualify, for use at accredited higher education institutions.
2. Student Loans: direct loans to students to be used at accredited institutions or programs of study. Such loans must be repaid following completion of the student's education.

While student aid increases the ability of students to attend accredited colleges and universities, it does not mean that all students have access to all colleges. Many colleges and universities in the United States are selective, meaning that potential students must meet standards set by those institutions themselves. However, student aid can make a greater number of institutions affordable to more students, thus increasing access. Student aid in no way guarantees student success. Success in a program of study is up to each individual student and the education choices and effort they make. Aid increases access, but does not make educational achievement easier or more likely.

It is also important to note that because the U.S. is a democracy, the political party in power can and does change. This means a change in political philosophy is often reflected in new laws and regulations. On the other hand, CHEA's standards and procedures for the recognition of accrediting organizations are not driven by political considerations, but by a desire that they be more effective and less burdensome. CHEA most recently updated its recognition standards and procedures in 2021. CHEA recognition is more likely than USDE recognition to have an impact on accreditors' work to advance academic excellence because CHEA focuses on academic quality and improvement, while the USDE is focused on accreditors' role as gatekeepers for federal funds.

The Triad

Accrediting organizations and the USDE are joined by the 50 states in their oversight of higher education. States play a key role in the authorization of higher education institutions, including licensing institutions as business entities (which is different from accrediting the institutions) and authorizing them to grant degrees in-state.

1. Together, accreditors, the USDE, and the states are referred to as the “Triad,” with:
2. The USDE focused on accreditors’ role as gatekeepers for federal funds.
3. States focused on legal authorization of institutions to operate and grant degrees.
4. Accrediting organizations focused on academic and institutional quality and improvement.

It is a strength that each of these entities has a different focus, enabling each to concentrate on its area of expertise.

Challenges for accreditation in the U.S.

While accreditation in the U.S. continues to serve students, prospective students, parents, and the public, it is not without challenges. Six key challenges are outlined below.

Academic Freedom

Academic freedom – and even the concept of academic freedom – is under attack in parts of the United States. The freedom of academics to design course agendas or to speak out on certain issues has been challenged by state legislatures and institutional boards of trustees. A curtailment of academic freedom could stop an institution from meeting the academic freedom standards of its accreditor. Accreditors themselves have been attacked for raising academic freedom questions. One state mandated that public institutions change accreditors each accreditation cycle as an apparent pushback for raising academic freedom inquiries.

Cost of higher education

The cost of attending higher education institutions has grown substantially and in excess of the rate of inflation, limiting access to many institutions. If access to an institution is severely curtailed by its high cost, the student body will in turn become less diverse. Meanwhile, accrediting organizations indicate that they view diversity as an integral part of a quality higher education experience.

Funding for higher education

Like the cost of attending a higher education institution, the cost of operating an institution has grown. At the same time, state funding for higher education has decreased in recent years. This can lead to financial insecurity. The inability to guarantee a consistent, non-variable level of funding is a leading reason that institutions lose accreditation. This is a challenge for institutions and accreditors alike.

Transfer of Credit

The ability to transfer credits earned at one institution to another is of importance to students not only for financial reasons but also for the time saved by not having to retake courses of study. The challenge of transferring credits increases if the institutions in question are of different types (e.g., community college credits to a public or private university). Transfer of credits is a growing issue for the USDE, with the government increasingly resisting the idea of “paying for the same course twice.”

Pressure to regulate

In the U.S., some politicians and public interest organizations argue that unless higher education is required to meet its obligations, institutions will not provide quality education. They believe that the government, not academia, should determine and set quality standards. They also believe that all information about accreditation review – which by its very nature involves sensitive information and preliminary findings – should be made public as a way to increase transparency. Some question the value of accreditation’s emphasis on peer review. These changes would require a major restructuring of current accreditation practices.

Diversity, equity, and inclusion

Accrediting organizations have echoed society in seeking progress within institutions and programs to increase diversity, equity, and inclusion, across student bodies, faculty, and administration. Institutions, in turn, are challenged to increase diversity, equity, and inclusion while maintaining high educational quality standards. Balancing calls for diversity with the challenges of maintaining and improving academics is a concern for institutions and for accrediting organizations.

Conclusion

While accreditation in the United States undeniably faces challenges in the years ahead, it continues and will continue to be a vital component to maintaining higher education quality and an emphasis on improvement. The size and complexity of institutional and programmatic accreditation in the U.S. – involving thousands of people, thousands of institutions, and tens of thousands of programs, and millions of dollars – is beyond the current capacity of the USDE. This is a challenge that accreditation has been meeting for more than one hundred years, to the benefit of students and society.

What features of U.S. accreditation's support for higher education may be of value for quality assurance leaders around the world to consider? These might include:

- The value of institutional mission, and having a diversity of institutional and programmatic offerings available to an increasingly diverse student population.
- The importance of institutional autonomy, where institutions themselves determine how to best meet the needs of students and potential students.
- The impact of academic freedom on the quality of an institution's higher education offerings.
- How peer review strengthens institutions of all sizes and missions.

Accreditation is the leading advocate for each of these aspects of higher education. The quality of higher education in the United States today is a reflection of the commitment of accreditation to assuring that quality and improving it for the future.

The independent review of accrediting organizations by CHEA is an important component of accreditation. CHEA's focus on academic quality and improvement is separate and distinct from the U.S. Department of Education, which focuses primarily on regulatory compliance and the fitness of accreditors to serve as gatekeepers for federal funding. By establishing CHEA in 1996 and funding it ever since, the academy has demonstrated that it highly values CHEA's independent peer review.

It is likely that the future will bring additional U.S. government involvement as to what is sufficient with respect to student learning outcomes, with additional directives to follow. At the same time, accreditation and the independent review of institutions and programs by their peers and colleagues likely will remain a key feature of higher education quality in the United States.

Acknowledgement

This paper was prepared with the valuable assistance of Tim Willard, formerly CHEA's Senior Director of Communications.

References

1. Council for Higher Education Accreditation. (2002, September). The Fundamentals of Accreditation: What Do You Need to Know?
2. Council for Higher Education Accreditation. (2003, May). The Value of Accreditation: Four Pivotal Roles [Letter from the President].
3. Council for Higher Education Accreditation. (2003, September). Statement of Mutual Responsibilities for Student Learning Outcomes: Accreditation, Institutions and Programs.
4. Council for Higher Education Accreditation. (2008). U.S. Accreditation and the Future of Quality Assurance: A Tenth Anniversary Report from the Council for Higher Education Accreditation. Peter T. Ewell.
5. Council for Higher Education Accreditation. (2008, September 22). Higher Education, Accreditation and Regulation. Milton Greenberg.
6. Council for Higher Education Accreditation. (2009, January 27). Recalibrating the Accreditation-Federal Relationship. Robert C. Dickeson.
7. Council for Higher Education Accreditation. (2019). Working With Members, Informing the Public.
8. Council for Higher Education Accreditation. (2021). Almanac of External Quality Review.
9. Council for Higher Education Accreditation. (2021). CHEA Standards and Procedures for Recognition.
10. Council for Higher Education Accreditation. (2022, September 30). The Importance and Value of CHEA Recognition [Inside Accreditation]. Cynthia Jackson-Hammond.
11. Eaton, J. (2003). Is Accreditation Accountable? The Continuing Conversation Between Accreditation and the Federal Government [CHEA Monograph Series, Number 1]. Council for Higher Education Accreditation.
12. Eaton, J. (2017, March 1). Disruption in the U.S. Accreditation Space [Policy Brief, Number 9]. Council for Higher Education Accreditation.
13. Eaton, J. (2020, July 29). Rethinking What “Quality” Means for Accreditation and Higher Education [Inside Accreditation]. Council for Higher Education Accreditation.
14. Eaton, J. (2020, June 17). Taking Initial Steps: A Path for Rethinking Accreditation and Quality Assurance [Inside Accreditation]. Council for Higher Education Accreditation.
15. Eaton, J. (2020, May 4). Accreditation and the Future of Quality [Inside Accreditation]. Council for Higher Education Accreditation.
16. Finkin, M. (2009, January 27). Who Watches the Watchman? Thoughts on the Federal Relationship to Accreditation in Higher Education.



Contact us:

 +971 6 5077560

 www.rcepunesco.ae

 info@rcepunesco.ae