Envisioning Pathways to 2030:
Megatrends shaping the future of global higher education and international student mobility

bit.ly/Megatrends2030
A decade ago, the world was not prepared for the widespread impact of the global financial recession. Gradually, the operating focus of higher education sector in many high-income countries around shifted, causing budget-cuts to become a recurring and dominant theme. Yet, at the same time, the expanding middle-class in emerging countries were keen to gain international experience – thus fueling student mobility.

Now, we are on the cusp of another major transformation. The acceleration of external megatrends - including technological and societal changes - are expected to push higher education institutions (especially in high-income countries) towards offering more relevant, affordable, and flexible academic programmes. As a result, universities have an opportunity to overcome enrolment challenges by maximising the potential of engaging new population through including adult learners (lifelong and online learning) and international students (recruitment and transnational education).

In this report, we address following broad questions: What are the megatrends shaping the world? How are these megatrends transforming the future of global higher ed? What are the implications for international student mobility and global engagement strategies? We articulate our vision for the future of global higher education by synthesising various external reports and data with the perspectives of higher education leaders from around the world. We propose conceptual frameworks for institutional archetypes of success and for their global engagement strategies leading up to 2030.

This report is designed for higher education professionals in high-income countries many of whom are facing enrolment growth challenges. We recognise the diversity within the higher education landscape across and within countries, and, hence, do not claim to offer predictive and prescriptive findings. The purpose and approach of this report is to encourage higher education institutions to reflect, assess, and discover alternative pathways for the future leading up to 2030.

We welcome your questions/suggestions/experiences at Rahul@Studyportals.com

Rahul Choudaha, EVP of Global Engagement, Research and Intelligence
Edwin van Rest, CEO and co-founder

About Authors

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Conceptual frameworks and perspectives from global higher education leaders
External forces transforming the world around us:

- Aging world: finding new education and employment opportunities
- Labour market shifts: increasing automation to affect global workforce
- Skills mismatch: gap between what employers demand vs. what education provides
- Rapid urbanisation: shift towards cities in search of jobs and career advancement
- Stricter immigration policies: more barriers for mobility to high-income destinations.
- Economic shifts: dependence on emerging markets for economic growth.
- Capacity imbalance: demand in emerging economies vs. supply in developed economies
- Budget pressures: higher education is facing decline in public funding

Quantitative growth in higher education enrolment:
- 332 million by 2030; an increase of 56% or 120 million students from 2015.

Qualitative shift in the nature of demand:
- Advancement of lifelong learning
- Adoption of online/blended learning.
- Unbundling of credentials.
- Orientation for career outcomes.
- Specialisation/consolidation of institutions.

Higher education institutions ought to enhance relevance, affordability, and flexibility of academic offerings to catch up with the quantitative growth and qualitative shift in demand.

Quantitative growth international student enrolment:
- 6.9 million by 2030; an increase of 51% or 2.3 million students from 2015.

Qualitative shift in the nature of demand:
- Regional destinations growing more attractive
- Innovation and expansion of transnational models.
- Surge of English-taught programmes in new destinations.
- Higher ambitions of and investments for world-class universities.
- Accelerated growth of global, multi-institutional networks.

Higher education institutions should complement traditional mobility with innovation in programme offerings and delivery methods.
Reconciling the mismatch between enrolment demand and supply requires attracting and engaging a new population

- Globally by 2030, higher education enrolment will grow in diverse ways within and across countries1

- Megatrends will compel institutions (especially in high-income countries2) to offer more relevant, affordable, and flexible academic programmes to catch up with the quantitative growth, and qualitative shift, in the demand

  - Lower- and middle-income countries will see the higher education demand from the traditional college-age population grow larger relative to the supply of institutions

  - High-income countries will face stagnant enrolment unless they expand their pool to include the non-traditional domestic population (age over 24) through lifelong, online, or blended learning

  - High-income countries are also capable of reaching underserved (or unserved) students in lower- and middle-income countries. Some strategies include: transnational education, and recruiting international students to campuses

  - Institutional archetypes of success and global engagement strategies proposed in this report offer alternative pathways for institutions leading up to 2030

1. For example, while overall U.S. population for 2030 is projected to increase, population under 18 will decrease by 2 percent. By 2030, Texas and Florida will experience much higher growth than Illinois and Maine. (US Census)
2. Income classification by World Bank
By 2030, an estimated increase of nearly 120 million students in higher education and 2.3 million internationally mobile students.

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All numbers in thousands
Source: UNESCO Institute of Statistics
Lifelong learning potential in high-income countries

4.3 million

A one percent annual increase number of non-traditional students (age over 24) between 2015-2030 will translate into 4.3 m. more enrolled students in 15 high-income countries

Source: Authors’ analysis based on data of 15 high-income countries—United States, United Kingdom, Australia, France, Germany, Canada, Japan, Italy, Netherlands, Austria, Belgium, Korea, Switzerland, New Zealand, Spain—in the order of number of international student enrolment. Total enrolment in these 15 countries grew by 1% between 2014 and 2015. They enrol 63% of all globally mobile students and contribute to 55% of world’s GDP.
International student enrolment potential in high-income countries

412,000

A one percent annual increase in international student enrolment between 2015-2030 will translate to 412,000 more students in 15 high-income countries

Source: Authors' analysis based on data of 15 high-income countries—United States, United Kingdom, Australia, France, Germany, Canada, Japan, Italy, Netherlands, Austria, Belgium, Korea, Switzerland, New Zealand, Spain—in the order of number of international student enrolment. Total enrolment in these 15 countries grew by 1% between 2014 and 2015. They enrol 63% of all globally mobile students and contribute to 55% of world's GDP.
Institutional archetypes of success

1. **Niche Research Institute**: Knowledge and curriculum generator; a focus on being ‘the world’s best’ in a particular discipline, ideally tied to industry hubs

2. **Elite, Comprehensive University**: Interdisciplinary knowledge generator. Shrinking opportunities for these institutions in the world; have increasingly had to specialise and become a sub-set of (1)

3. **‘Club HigherEd’**: Curriculum consumer – focus on student experience (mentoring, facilities)

4. **Scalable Digital University**: Curriculum consumer – focus on flexibility, learning platforms, (automated) support, improved access

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University networks as well as interregional/- national universities expected to grow
The Pyramid of Higher Ed: Market diversifying and segmenting due to multi-dimensional barriers to access
The Future Pyramid of Higher Ed will expand access via new models of learning.

- **2015**
  - 213 million enrolment
  - ~1 billion people with need, no access (yet)

- **2030**
  - 332 million projected enrolment
  - Larger participation rate, larger middle class, lifelong learning
  - More exclusivity at the top due to global competition and consolidation
  - Opportunity for new models/modes of learning to increase access beyond traditional thresholds
Conceptual framework of institutional global engagement strategies mapping solutions with needs

- **Defenders**: Familiar programmes delivered in English-speaking countries through student mobility

- **Adapters**: Familiar programmes delivered through new capabilities of online, blended, and transnational models

- **Innovators**: New programmes delivered through new capabilities of lifelong learning, unbundling and networks

- **Challengers**: Familiar English-taught programmes delivered in new destinations in Asia/Europe

Solutions/Approaches

Choudaha, Rahul & van Rest, Edwin (2018). Envisioning pathways to 2030: Megatrends shaping the future of global higher education and international student mobility. Studyportals
Webinar
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David Finegold
President
Chatham University

Fernando León Garcia
President
CETYS University System

Wendy Purcell
Emeritus President & VC
Plymouth University

Rahul Choudaha
EVP of Global Engagement
Studyportals
Webinar

The Innovation Imperative for a Globally Relevant and Impactful University

bit.ly/GlobalEdLead

Ann Buller
President
Centennial College

Ashish K. Vaidya
Interim President
St. Cloud State University

Elizabeth J. Stroble
President
Webster University

Rahul Choudaha
EVP of Global Engagement
Studyportals
Studyportals at a Glance

Mission: Empowering the world to choose education

9 Portals
28+ million unique users last 12 months
150,000 programmes from institutions in 120 countries
370,000 international student enrolments (2017)
3,050+ Participating institutions
180+ employees
35 nationalities

Boston | Bucharest | Chicago | Colombo | Eindhoven (HQ) | Manchester | Melbourne | San Francisco | Stockholm
**Rahul Choudaha** is Executive Vice President of Global Engagement, Research and Intelligence at Studyportals. Operating out of San Francisco Bay Area, Choudaha advances Studyportals’ strategic engagement with higher education institutions, professional associations and government bodies on the foundations of research and intelligence. He has presented over 100 sessions at professional conferences and has been frequently quoted in global media on international higher education trends with a focus on student mobility and enrolment strategies. Choudaha holds a doctorate in higher education administration from University of Denver.

**Edwin van Rest** is the CEO and co-founder of Studyportals. He is a grateful benefactor of international education and is driven by the mission of making education choice transparent, globally. As a co-founder, he has led Studyportals to an organisation of nearly 200 professionals around the world, serving 30m student users annually and with 3,050+ participating universities. He is an elected member of the General Council of EAIE: European Association for International Education. Edwin earned Industrial Engineering and Management Science from Eindhoven University of Technology. As part of his master’s degree he spent one year at Osaka University in Japan.
Part One

Context of Global Higher Education
Growth in tertiary enrolment

- 207 million students enrolled in higher education in 2014
- Between 2000 and 2014:
  - Higher education enrolment more than doubled, rising from 100 million to 207 million
  - Global gross enrolment ratio increased from 19% to 34%
  - 30% of all global higher education enrolments in private institutions

*higher education enrolment is defined as a percentage of population between 19-23 years
Source: UNESCO (2017) Six ways to ensure higher education leaves no one behind
• Tertiary enrolment growth driven by Upper-middle income countries
• Lower-middle income countries surpassed high income countries in 2012

Source: Authors’ analysis of data from UNESCO Institute of Statistics
Total internationally mobile students (in thousands)

- Almost 50% growth in internationally-mobile students between 2007-2015

- Nearly three-quarters of internationally-mobile students are studying in “developed” countries*

Source: Authors’ analysis of data from UNESCO Institute of Statistics

* Based on Millennium Development Indicators: World and regional groupings
Nation’s capacity to and (emphasis on) enrolling international students differs by level of education

International student enrolment as a percentage of total tertiary education (2015)
Concentration by field of studies

- International students account for 5.6% of total tertiary institution enrolment:
  - About one-third in STEM fields of study
  - 28% in business, administration and law

Concentration by source countries

- Students from Asia form the largest group of international students enrolled in OECD tertiary education programs at all levels (1.56 million in 2015):

  - Of these, 612,000 come from China.
  - Three-quarters of Asian students culminate in three countries: the United States (44%), Australia (16%) and the United Kingdom (15%).
  - The second major region of origin of international students is Europe, with 782,000 European students crossing borders for the purpose of studying. European students prefer to circulate within Europe: 82% of them enrol in tertiary studies in another European country.
Transnational education: Mobility of programmes

- TNE is often defined as the ‘provision of education for students based in a country other than the one in which the awarding institution is located.’

**Distance/online learning**
- ...with local support
- ...with no local support
- Blended

**Local delivery partnership**
- Double dual, or multiple degree
- Franchised programme
- Joint Degree
- ‘Top-up’ programme
- Validation or ‘quality assurance’ programme

**Physical presence**
- Branch campus
- Flying faculty or ‘outreach’
- Study centre

Source: HEGlobal (2016) The Scale and Scope of UK Higher Education Transnational Education
Growth of English-taught Programmes in non-English speaking countries

English-taught Bachelor’s (ETBs) constitute 27% of the total number of English-taught programmes offered at Master’s and Bachelor’s level in Europe.

Source: Sandström, Anna-Malin & Neghina, Carmen (2017). English-taught bachelor’s programmes: Internationalising European higher education. European Association for International Education (EAIE) and StudyPortals
Rise in promoting World-class University ambitions in emerging countries

- Governments and universities have incorporated the logic of competitive advantage within their higher education and research landscapes. For example, Japan, Russia, Vietnam, France, China and over 30 other countries have pursued excellence initiatives.

- The importance of growing the number of international students and bolstering 'excellence' in global research centres are key parts of government policy; the correlation of these factors alongside global rankings has not been accidental.

Summary

- Globally, higher education enrolment has seen a growing trajectory. However, the bulk of this growth is driven by middle-income countries. In the past few years, high-income countries, by contrast, have experienced a decline/stagnancy in enrolment.

- The number of internationally-mobile students has been growing steadily, but still forms a smaller proportion of total enrolment within tertiary programs. A majority of internationally-mobile students are enrolled in high-income countries. In general, international students more likely come from Asia, enrolling in Master’s- and doctorate-level, career-oriented fields (STEM, business, administration and law).

- Proliferation of English-taught programmes in Europe, the ambitions of world-class universities in emerging countries, and evolution of transnational education models will shift the nature and direction of internationally-mobile students.

- External global megatrends will further catalyse changes.
Part Two

Megatrends Shaping the World Around Us
Megatrend: a long-term, transformational process with global reach, broad scope, and a dramatic impact

(John Naisbitt, 1982)
8 Megatrends

1. Aging world: finding new opportunities of education and employment
2. Labour market shifts: increasing automation to affect global workforce
3. Skills mismatch: gap between what employers demand vs. what education provides
4. Rapid urbanisation: shift towards cities in search of jobs and career advancement
5. Stricter immigration policies: more barriers for mobility to high-income destinations.
7. Capacity imbalance: demand in emerging economies vs. supply in developed economies
8. Budget pressures: higher education is facing decline in public funding
Eighty-two percent of growth in population between 2015-2030 will be driven by people aged 35 and over.

- 20-34: 1,820 (2030), 1,766 (2015)
- 50-64: 1,334 (2030), 1,038 (2015)

All numbers in thousands. Source: Employment and social protection in the new demographic context, ILO.
Labour market shifts: increasing automation to affect global workforce

Number of workers keen to advance beyond current occupation to adapt to changing job opportunities, 2016-30

Source: McKinsey (2017) What the future of work will mean for jobs, skills, and wages

Midpoint automation

Additional form rapid automation adoption (each block = 1 million workers)
Skills mismatch: gap between what employers demand vs. what education provides

7/10 people are currently in jobs where the future of their career, profession, or industry is uncertain.

Rapid urbanisation: demographic shift towards cities in search of jobs and career advancement

Stricter immigration policies: more barriers for mobility to high-income destinations

In 2015, 3.3% of the world’s population are living outside their country of birth. That’s 245M immigrants worldwide.

Refugees represent less than 10% of total migrants.

While the share of immigrants coming from developing countries stayed the same...

<table>
<thead>
<tr>
<th>Year</th>
<th>Share of Immigrants from Developing Countries</th>
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<tbody>
<tr>
<td>1995</td>
<td>79%</td>
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<tr>
<td>2015</td>
<td>80%</td>
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More migrants are heading to high-income destinations.

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<td>1995</td>
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Source: Perspectives on Global Development (2017) OECD
Economic shifts: dependence on emerging markets for economic growth

Middle class in 2010 and forecast for 2030.

Source: Global Trends to 2030. Europa
Capacity imbalance: demand in emerging economies vs. supply in developed economies

Ratio of projected population in 2030 to estimated population in 2015 by the level of gross national income per capita in 2014, 183 countries or areas

Ratio of total population in 2030 compared to 2015

Budget pressures: higher education is facing decline in public funding


% of GDP

Private expenditure on educational institutions
Public expenditure on educational institutions

8 Megatrends

While there are a few other external forces in play, we identify eight megatrends which are likely to interact in a manner to transform the future of global higher education and international student mobility.

The world is getting older which will encourage institutions to find new ways to educating and employing the aging population throughout their career and beyond. Increasing pace of automation and skills mismatch will create new expectations for market-relevant skills and retraining of talent. Rapid urbanisation will result in more people moving towards cities which in turn will drive demand for accessible and flexible learning models. Despite demographic challenges, stricter immigration policies in high-income countries may make it more difficult for finding migration pathways. Economic growth in emerging markets will drive demand for expanding access to higher education. It will also fuel aspirations and capacities to afford studying abroad. Imbalance in demand for higher education among youth population in emerging economies and large supply of institutions in high-income economies will provide opportunities for engaging through international recruitment and transnational education. Public defunding of higher education will continue with increasing expectations of self-funding through enrolment growth and academic innovation.

In sum, these megatrends will disrupt the higher education sector (especially in high-income countries) as well as international student mobility patterns. Next, we present perspectives of higher education leaders, along with our conceptual framework of institutional archetypes of success and their global engagement strategies for institutional leaders to identify their pathways for growth and sustainability.
Part Three

Implications for Institutional Strategies
By 2030, an estimated increase of nearly 120 million students in higher education and 2.3 million internationally mobile students

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All numbers in thousands
Source: UNESCO Institute of Statistics
163 million

More 25-34 year-olds with a tertiary degree in 2030 compared to those in 2013

Growth in tertiary degree attainment to be driven by emerging countries

Share of 25-34 year-olds with a tertiary degree across OECD and G20 countries (2013, 2030)

Source: OECD (2015) How is the global talent pool changing?
75% of the global STEM graduates will be in BRIICS countries, compared to 8% in the US and 4% in Europe by 2030

BRIICS: Brazil, Russia, India, Indonesia, China, South Africa
Source: OECD (2015) How is the global talent pool changing (2013, 2030)?
Lifelong learning gains traction

The 2030 Agenda for Sustainable Development is an inter-governmental commitment and “a plan of action for people, planet and prosperity.”

UNESCO’s Sustainable Development Goal 4 (SDG4) : Quality Education-
“Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.”

“What is also new to SDG4 is the focus on the relevance of learning outcomes both for the world of work, as well as for citizenship in a global and interconnected world.”

Source: Unpacking Sustainable Development Goal 4: Education 2030, UNESCO
Lifelong learning potential in high-income countries

4.3 million

A one percent annual increase number of non-traditional students (age over 24) between 2015-2030 will translate into 4.3 m. more enrolled students in 15 high-income countries

Source: Authors' analysis based on data of 15 high-income countries—United States, United Kingdom, Australia, France, Germany, Canada, Japan, Italy, Netherlands, Austria, Belgium, Korea, Switzerland, New Zealand, Spain—in the order of number of international student enrolment. Total enrolment in these 15 countries grew by 1% between 2014 and 2015. They enrol 63% of all globally mobile students and contribute to 55% of world’s GDP.
Lifelong learning potential in emerging markets

3.6 million

A one percent annual increase in enrolment of non-traditional students (age over 24) between 2015-2030 will translate to 3.6 m. more students in six emerging countries (BRIICS)

Source: Authors’ analysis based on data of six BRIICS countries—Brazil, Russia, India, Indonesia, China, South Africa. These six countries enrol 10% of all globally mobile students and contribute to 24% of world’s GDP.
International student enrolment potential in high-income countries

412,000

A one percent annual increase in international student enrolment between 2015-2030 will translate to 412,000 more students in 15 high-income countries

Source: Authors’ analysis based on data of 15 high-income countries—United States, United Kingdom, Australia, France, Germany, Canada, Japan, Italy, Netherlands, Austria, Belgium, Korea, Switzerland, New Zealand, Spain—in the order of number of international student enrolment. Total enrolment in these 15 countries grew by 1% between 2014 and 2015. They enrol 63% of all globally mobile students and contribute to 55% of world’s GDP.
A one percent annual increase in international student enrolment between 2015-2030 will translate to 65,000 more students in six emerging countries by 2030.
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More exclusivity at the top due to global competition and consolidation
Conceptual framework of institutional global engagement strategies mapping solutions with needs

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Perspectives of Global Higher Education Leaders

This section shares viewpoints of higher education leaders from around the world on the future higher education and implications for institutional strategies. View are personal. Listed in the order of first name.
Anant Agarwal
Founder and CEO, edX

Modular online education will break down boundaries and change the delivery of education - whether students learn online before going to campus, online while on campus, continue their education online after a campus education, or learn fully online - student mobility patterns will change, and innovative higher education institutions will see a new global reach. This unbundled approach enabled by modular credentials and credit exchanges will also foster lifelong learning habits, keeping our workforce nimble and eager to learn new skills on the job.
The widening mismatch between what employers demand and what institutions supply is one of the key megatrends to watch. The mismatch is already disrupting traditional models of higher education in career settings. The traditional mode of preparing students for business careers—the MBA—is declining in favor of a more data driven menu of certificate programmes, particularly in business analytics and data science. The decline in public funding will accelerate public/private partnerships in the online programme management space which will also have significant opportunities for enrolling global student populations.
Rising incomes in developing countries and a greater concentration of people and jobs in urban areas will drive demand for higher education. Rising incomes will stimulate more demand for conventional international mobility, but they will also create promising opportunities for international partnerships that deliver quality instruction locally or regionally. We should anticipate the emergence of new modes of delivery, and in some cases entirely new types of institutions.
After many decades of continuous growth of degrees at the expense of intermediate, middle-level skills, we may see some reversal, as technical and skilled manual work – i.e. electricians, plumbers, chefs – will be among the hardest to automate, while many degree-level occupations – e.g. law, accounting, routine computer programming, journalism, and data processing – are already being disrupted. Higher education institutions will need to prepare their students to be entrepreneurial and resilient, with the ability to continue to learn and reinvent themselves and their careers multiple times in their lives.
The convergence of external megatrends will require imaginative leadership and new kinds of partnerships for global higher education to thrive. For example, the combined effects of economic shifts, the rise of nationalism, capacity imbalance, and budget pressures contribute simultaneously to a heightened need for global higher education solutions that bring education to nations’ and students’ needs and increased barriers to enacting such solutions on the part of institutions and nations. Technology-supported solutions hold promise for optimizing the connections between expertise at higher education institutions and students in emerging economies.
It is important to note the unknowns in terms of skills needed. For example, what new positions and jobs are we educating for? Skills are not the sole outcome of university education. One would argue that knowledge and critical thinking are even more important. Higher education institutions must ensure this balance. The youth dividend of Africa will present new opportunities and challenges for future of higher education.
Economic shifts and capacity imbalances are among the trends most likely to impact developing economies. These will require an improvement in the quality of and participation rates in higher education across developing countries, whether it is through their own efforts, cross border partnerships, TNE or new models for capacity building. Rather than a single predominant institutional model, one is likely to observe a diversity of models, where at one end of the spectrum there will be institutions with entirely new models responding to new needs and new markets, while at the other end we will see institutions that will only make slight changes to remain current and relevant to their existing models.
Gordon Slaven
Managing Director, Slaven Consultancy Services Ltd
Former Head of higher education services, British Council

Work-ready graduates, with appropriate skills for changing global economic environment, will always be in high demand. Given the capacity and geographic imbalance between the demand for this kind of education, and the capacity to deliver it, as well as continued student mobility, it is likely that will be an increase in remote delivery of education from the global top 1% universities, through technologies, a variety of local partnerships, and through branch campuses. We are also likely to see greater numbers of ‘global brands’ incorporating consortia of individual institutions.
For higher education institutions which want to survive and thrive, responding to the intersection of these megatrends means repackaging courses into 60-year curriculums to help learners always be ready for their next social, civic or professional challenge. It is critical that institutions think globally and have our offering available anywhere anytime at many price points based on human support level included. For all that can do this and measure every element of their supply chain and outcomes for continuous improvement, financial and societal success are waiting.
Ken Gill
CEO, NCUK- The University Consortium

Increased automation will drive the mismatch of employment skills as the rapid changes in the workplace will not be matched with the speed at which the higher education sector can adapt. Emergence of world-class Asian universities would further undermine the “old west” and a greater flow of students to the Far East, China in particular. Capacity imbalance would argue for increasing use of technology and blended learning, creating more TNE joint ventures, and combining institutions with specialized focus.
The continued rise of the mega-cities and urbanisation, especially in the emerging world will drive the need for different forms of enabling ‘education’ for all. The Campus of the future will become a creative HUB, where partners come together. So, not all universities have to be experts in all things. Universities become nodes within networks of excellence, where the network hosts the total expertise, which becomes available across the Globe according to local need and context.
It is possible to conceive of a higher education supply chain with a broad variety of mission focused institutions which closely align to a lifelong learning student profile with the HEI choosing to engage with students at particular points in their life curve or creating interdisciplinary programmes in selected areas to support particular cohorts of students across their learning lifetime. Institutions will have to share resources and utilise emerging technologies like MOOCs in a more creative fashion, utilising globally but assessing locally. This will require a greater creativity in curriculum and programme development.
Higher education would become more differentiated, more distinctive in its offer (learning tools, programme offer, skills updating etc.) so that student choice is informed by clarity about the offer and return on investment that in some case is lifelong while in others is simply a project-long or perhaps job-long return. We need to see lifetime education as a key trend to rebalancing the global economy. And, we need to have higher education cultivate thinking, aliveness and creativity – we are moving beyond content into experience. While studying overseas will remain a prized experience, growing excellence of in-country higher education among those countries that today account for high levels of mobility will result in more growth for master’s, doctorate, short courses and online degrees than undergraduate degrees.
How is your institution preparing for the potential impact of megatrends?

- Conduct programme portfolio reviews for cost and revenue
- Improve student employability outcomes
- Identify new sources of revenue
- Offer new lower-cost and shorter duration programmes
- Expand online offerings for global markets
- Develop new curriculum, delivery models, and partnerships
- Deliver lifelong learning and job-focused credentials
- Adapt current forms of learning to unbundling of credentials
- Explore transnational education partnerships
- Recruit international students
Globally, higher education enrolment will grow with wide variations within and across countries. In this report, we have identified a number of external forces or megatrends that continue to transform the world around us. These megatrends will disrupt the higher education sector (especially in high-income countries) as well as international student mobility patterns. The fast rate of change, coupled with a high degree of uncertainty, makes it crucial for institutions to be proactive and adaptive. These megatrends will push institutions, especially in high-income countries, towards offering more relevant, affordable, and flexible programmes, enabling them to catch up with the quantitative growth and qualitative shift in the demand.

Perspectives of higher education leaders from around the world, along with our own analysis, confirm that the future of higher education will look significantly different. Through our conceptual framework of institutional archetypes of success and their global engagement strategies we offer an opportunity for institutional leaders to reflect, assess, and discover how they would ensure that their institutions grow and thrive. For example, the continued shift in the demographic, technological, and economic contexts will encourage institutions to experiment and innovate with new models of blended, online, or lifelong learning. Likewise, institutions need to complement traditional student mobility with innovation in programme offerings and delivery methods in response to the shifting context of international student mobility.

While we recognize that not all institutions will neatly fit into our conceptual frameworks, we offer still alternative pathways for institutions as they design their future leading up to 2030.

We welcome your questions/suggestions/experiences at Rahul@Studyportals.com

**Rahul Choudaha**, EVP of Global Engagement, Research and Intelligence  
**Edwin van Rest**, CEO and co-founder

**About Authors**

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bib.ly/Megatrends2030
Growth context of tertiary and international enrolment in 15 high-income countries

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>2015</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tertiary Enrolment</td>
<td>43,572,547</td>
<td>43,973,316</td>
<td>1%</td>
</tr>
<tr>
<td>Int'l Student Enrolment</td>
<td>2,744,851</td>
<td>2,942,591</td>
<td>7%</td>
</tr>
<tr>
<td>Int'l Enrolment as % of Tertiary Enrolment</td>
<td>6%</td>
<td>7%</td>
<td></td>
</tr>
</tbody>
</table>

Source: Authors’ analysis based on data of 15 high-income countries—United States, United Kingdom, Australia, France, Germany, Canada, Japan, Italy, Netherlands, Austria, Belgium, Korea, Switzerland, New Zealand, Spain—in the order of number of international student enrolment. They enrol 63% of all globally mobile students and contribute to 55% of world's GDP.
<table>
<thead>
<tr>
<th>Country</th>
<th>Total Tertiary Enrolment, All Ages</th>
<th>Total Tertiary Enrolment, Over 24</th>
<th>Population, Over 24</th>
<th>Participation Level, Over 24</th>
<th>Total Int'l Enrolment</th>
<th>Int'l Enrolment as % of Total Tertiary Enrolment</th>
<th>GDP</th>
<th>Income Category of Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>19,532</td>
<td>8,094</td>
<td>214,213</td>
<td>3.8%</td>
<td>829,412</td>
<td>4.2%</td>
<td>18,036,648,000</td>
<td>High-income, OECD</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>2,330</td>
<td>812</td>
<td>45,943</td>
<td>1.8%</td>
<td>428,724</td>
<td>18.4%</td>
<td>2,858,003,088</td>
<td>High-income, OECD</td>
</tr>
<tr>
<td>Australia</td>
<td>1,903</td>
<td>942</td>
<td>16,173</td>
<td>5.8%</td>
<td>266,048</td>
<td>14.0%</td>
<td>1,230,859,429</td>
<td>High-income, OECD</td>
</tr>
<tr>
<td>France</td>
<td>2,424</td>
<td>448</td>
<td>45,171</td>
<td>1.0%</td>
<td>235,123</td>
<td>9.7%</td>
<td>2,418,945,624</td>
<td>High-income, OECD</td>
</tr>
<tr>
<td>Germany</td>
<td>2,978</td>
<td>1,412</td>
<td>62,316</td>
<td>2.3%</td>
<td>210,542</td>
<td>7.1%</td>
<td>3,363,599,908</td>
<td>High-income, OECD</td>
</tr>
<tr>
<td>Canada</td>
<td>1,564</td>
<td>490</td>
<td>25,595</td>
<td>1.9%</td>
<td>164,274</td>
<td>10.5%</td>
<td>1,552,807,652</td>
<td>High-income, OECD</td>
</tr>
<tr>
<td>Japan</td>
<td>3,845</td>
<td>56</td>
<td>99,231</td>
<td>0.1%</td>
<td>132,685</td>
<td>3.5%</td>
<td>4,383,076,298</td>
<td>High-income, OECD</td>
</tr>
<tr>
<td>Italy</td>
<td>1,826</td>
<td>542</td>
<td>45,639</td>
<td>1.2%</td>
<td>87,544</td>
<td>4.8%</td>
<td>1,821,579,869</td>
<td>High-income, OECD</td>
</tr>
<tr>
<td>Netherlands</td>
<td>843</td>
<td>279</td>
<td>12,028</td>
<td>2.3%</td>
<td>70,692</td>
<td>8.4%</td>
<td>750,318,057</td>
<td>High-income, OECD</td>
</tr>
<tr>
<td>Austria</td>
<td>426</td>
<td>196</td>
<td>6,445</td>
<td>3.0%</td>
<td>65,165</td>
<td>15.3%</td>
<td>376,967,406</td>
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</tr>
<tr>
<td>Belgium</td>
<td>505</td>
<td>101</td>
<td>8,043</td>
<td>1.3%</td>
<td>55,516</td>
<td>11.0%</td>
<td>455,106,662</td>
<td>High-income, OECD</td>
</tr>
<tr>
<td>Korea</td>
<td>3,268</td>
<td>564</td>
<td>36,815</td>
<td>1.5%</td>
<td>52,451</td>
<td>1.6%</td>
<td>1,377,873,196</td>
<td>High-income, OECD</td>
</tr>
<tr>
<td>Switzerland</td>
<td>294</td>
<td>146</td>
<td>6,144</td>
<td>2.4%</td>
<td>49,536</td>
<td>16.8%</td>
<td>670,789,929</td>
<td>High-income, OECD</td>
</tr>
<tr>
<td>New Zealand</td>
<td>270</td>
<td>114</td>
<td>3,035</td>
<td>3.8%</td>
<td>48,892</td>
<td>18.1%</td>
<td>173,416,552</td>
<td>High-income, OECD</td>
</tr>
<tr>
<td>Spain</td>
<td>1,964</td>
<td>720</td>
<td>35,146</td>
<td>0.0%</td>
<td>48,247</td>
<td>2.5%</td>
<td>1,192,955,481</td>
<td>High-income, OECD</td>
</tr>
<tr>
<td>Brazil</td>
<td>8,285</td>
<td>3,907</td>
<td>124,983</td>
<td>3.1%</td>
<td>19,093</td>
<td>0.2%</td>
<td>1,772,591,280</td>
<td>Upper-middle-income, non-OECD</td>
</tr>
<tr>
<td>Russia</td>
<td>7,435</td>
<td>1,824</td>
<td>104,410</td>
<td>1.7%</td>
<td>213,347</td>
<td>2.9%</td>
<td>1,326,016,016</td>
<td>Upper-middle-income, non-OECD</td>
</tr>
<tr>
<td>India</td>
<td>30,306</td>
<td>2,084</td>
<td>692,396</td>
<td>0.3%*</td>
<td>41,993</td>
<td>0.1%</td>
<td>2,116,239,206</td>
<td>Lower-middle-income, non-OECD</td>
</tr>
<tr>
<td>Indonesia</td>
<td>5,108</td>
<td>427</td>
<td>141,871</td>
<td>0.3%</td>
<td>7,235</td>
<td>0.1%</td>
<td>861,933,966</td>
<td>Lower-middle-income, non-OECD</td>
</tr>
<tr>
<td>China (P.R.)</td>
<td>43,367</td>
<td>1,217</td>
<td>967,848</td>
<td>0.1%</td>
<td>108,217</td>
<td>0.2%</td>
<td>11,158,456,654</td>
<td>Upper-middle-income, non-OECD</td>
</tr>
<tr>
<td>South Africa</td>
<td>1,019</td>
<td>443</td>
<td>32,295</td>
<td>1.4%</td>
<td>42,594</td>
<td>4.2%</td>
<td>314,571,181</td>
<td>Upper-middle-income, non-OECD</td>
</tr>
</tbody>
</table>


* Data unavailable. Assumed as a conservative estimate similar to that of Indonesia.
Additional Resources

Bert van der Zwaan (2017). Higher Education in 2040
Centre for Educational Research and Innovation (CERI) - University Futures, OECD
CGS and ETS (2017). Graduate Education 2030: Imagining the Future
Diana Laurillard and Eileen Kennedy (2017). The potential of MOOCs for learning at scale in the Global South
Max Roser. Our World in Data.
Megatrends by British Council
Megatrends by E&Y
Megatrends by Euromonitor
Megatrends by PwC
Megatrends by Sydney Business Insights
Oxford Martin Programme. Publications
What is Your Vision for Universities? University Alliance