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ACCESS AND COMPLETION FOR UNDERSERVED STUDENTS: INTERNATIONAL PERSPECTIVES

Working paper prepared for

Global Attainment and Inclusion Network (GAIN)
An initiative of the American Council on Education and Lumina Foundation

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LIST OF ABBREVIATIONS

AnSEO	Student Engagement Office, Cork Institute of Technology (Ireland)
BFUG	Bologna Follow-Up Group
CIT	Cork Institute of Technology (Ireland)
DARE	Disability Access Route to Education (Ireland)
ECU	Equality Challenge Unit (UK)
ECTS	European Credit Transfer and Accumulation System
EHEA	European Higher Education Area
EUA	European University Association
EQA	External Quality Assurance
ENEM	National Secondary School Examination (Brazil)
HEA	Higher Education Authority (Ireland)
HEA	Higher Education Academy (UK)
HEAR	Higher Education Access Route (Ireland)
HECS	Higher Education Contribution Scheme (Australia, New Zealand)
HEFCE	Higher Education Funding Council for England
HEEP	Higher Education Equity Program (Australia)
IAU	International Association of Universities
ICT	Information and Communication Technology
ICETEX	Instituto Colombiano de Crédito Educativo y Estudios Técnicos en el Exterior (Colombia)
IFM	Integrated Focus Model (Uniminuto, Colombia)
NARIC	National Academic Recognition Information Centres
NER	New Enrollment Ratio
OECD	Organization for Economic Cooperation and Development
OFFA	Office for Fair Access (England)
PNE	National Education Plan (Brazil)
PROFIS	Interdisciplinary Higher Education Program (Brazil)
PRONABES	National Scholarship Program (Mexico)
ProUni	Universities for All Program (Brazil)
PPS	Purchasing Power Standard
QA	Quality Assurance
RPL	Recognition of Prior Learning
RUC	Roskilde University (Denmark)
Stascan	Statistics Canada
TEF	Teaching Excellence Framework

UNESCO	United Nations Educational, Scientific and Cultural Organization
UNHCR	United Nations High Commissioner for Refugees
UNIMED	Mediterranean Universities Union
WDR	World Development Report

EXECUTIVE SUMMARY

The ACE-Lumina Foundation project, for which this report is written, is focused on extending the reach of higher education through innovative programs and effective pathways that support educational success among populations that have been underrepresented and frequently underserved. This has become an increasingly critical issue in the United States and also a matter of growing concern around the world. The report provides a broad overview of the topic in other parts of the world as a foundation for discussion and collaboration between the United States and other nations as a response to this challenge.

In its examination of a wide range of equity promotion policies and practices, the report highlights institutional initiatives that widen access, broaden participation and improve opportunities for success of underrepresented groups of students. It encompasses three major dimensions: a broad focus on the post-secondary cycle from admission to graduation; an emphasis on non-financial policies with an accompanying discussion of models for student financial support; a focus on OECD countries, primarily in Europe, but with additional examples from other countries and regions.

The report shows that, regardless of what part of the world, thoughtful policy and active implementation by institutions are an essential combination. This is especially true in widening participation among underrepresented groups. Sound public policy related to financial support for students is also a key variable. In the domain of non-monetary policy for the successful retention of students until graduation, more responsibility rests with institutions and their commitment to programs and practice that provide support and encouragement for students from families with little to no experience with higher education.

The hope is that this report will be part of an iterative process that will gather examples from many countries and widen the global base of information. The authors, however, caution that data limitations and the lack of monitoring of the educational progress of marginalized groups of students will present ongoing challenges. They note that few countries systematically collect data on retention and employability and, when they do, they do not necessarily differentiate the data by specific student characteristics.

The report concludes by looking across the globe for promising innovations. The authors note certain areas in which the United States is a leader but also point to innovative initiatives in other countries. From the power of learning analytics to social innovation solutions imbedded in higher education, there is an exciting array of developments that offer new ways to address inequality in higher education. These developments provide significant opportunities for cross-border collaboration and underscore the ACE-Lumina project's vision that nations have much to learn from one another as they address equity and opportunity in higher education.

INTRODUCTION

CONTEXT

The past sixty years have witnessed an unprecedented expansion of higher education in most parts of the world. According to United Nations Educational, Scientific and Cultural Organization (UNESCO) statistics, the average tertiary education enrolment rate rose from under 10 percent in 1970 to 36 percent in 2015. This means that, in many countries, universities have opened their doors to more students from underrepresented groups, as documented in the case of Latin America by a 2017 World Bank report (Ferreyra et al. 2017). However, in spite of the massification experienced by the Organization for Economic Cooperation and Development (OECD) countries and the extensive efforts to improve access in most developing countries, higher education—especially the university sector—a disproportionate share of enrolled students comes from wealthier segments of society (Marginson 2016). Even when they manage to get access, students from underserved and traditionally excluded groups tend to have lower success rates.

The increasing share of costs to students and the rising proportion of enrollment in private higher education—representing more than half the students in several Asian and Latin American countries—have also been associated with growing inequality in access and success at the post-secondary level, even in OECD countries. "Although there are valid efficiency arguments for diversifying higher education financing by increasing the non-public share of costs, there is concern that an increased private share could have adverse consequences for equity. Historically, participation in higher education has been strongly correlated with family socio-economic status and the educational attainment of parents" (OECD, 2006).

Any government committed to equal opportunities must therefore ensure that the entire education system is accessible to students from underrepresented groups. For that purpose, countries and institutions throughout the world have put in place measures and programs to overcome existing disparities and promote the access and success of students from underserved backgrounds.

OBJECTIVES OF THE STUDY

Against this background, the principal objective of this report is to review the range of equity promotion policies and institutional initiatives, both monetary and non-financial, directed toward widening participation and improving the chances of success of underrepresented groups of students.

METHODOLOGY

Scope

The scope of the study can be defined along three dimensions. First, the report focuses broadly on the students' post-secondary education cycle, from the time of admission (including the years immediately prior) to the time of completion (including the years of study between admission and graduation), with some consideration of employment issues. Second, with respect to the two principal factors of inequality—financial and non-monetary—the report puts more emphasis on non-financial policies, measures and programs, while acknowledging the importance of actions to remove the financial barriers faced by low-income students. Third, in terms of geographical coverage, the study focuses on equity situations and policies outside the United States, with a focus on a select group of OECD countries in Europe and elsewhere. It does also incorporate, whenever possible, good practice examples from other parts of the world. The purpose of focusing on experiences outside the United States is for this study to serve as a resource on the equity topic for the engagement of U.S. higher education with other regions and countries. Examples from the United States are included only in cases where U.S. institutions have played a pioneering role.

Data Limitations

While most OECD countries produce data on participation, they are of unequal coverage and quality. The capacity to monitor diversity in higher education is limited because of differences in the definition of under-represented groups and lack of data on key aspects of the students' socioeconomic background. Few countries collect data on retention and employability and, when they do, they do not necessarily differentiate the data by specific student characteristics. The example of Europe illustrates these limitations. European-wide statistics on widening participation are relatively limited and are dependent on the willingness and capacity of each country to collect the relevant data (Eurydice 2014; Sursock 2015). Data on disparities in higher education are even more incomplete in developing countries.

A further limitation to accessing national data is of a linguistic nature, which limits most particularly access to institutional illustrations of good practice. Taking again Europe as an example, there are 24 official languages and three official alphabets in the European Union alone, and an even greater linguistic diversity when the geographical scope is extended to the world.

It should be noted that data providing insights into access to higher education of students with disabilities are scarce. Available data sources tend to be more fragmented and unreliable than data describing educational access and attainment of disabled children and youths at lower levels of education. Data are often collected on an *ad hoc* basis and typically originate from a multitude of sources.

REPORT OVERVIEW

The report is organized into three parts and responds to the questions that were of particular interest the American Council on Education and Lumina Foundation. It starts by presenting available information about the definition and scope of disparities in higher education worldwide. It then reviews national and institutional approaches for promoting better equity in access and success, and identifies good practices from which relevant lessons can be drawn. Finally, it analyzes new developments in higher education that may transform the ways in which countries and institutions attempt to reduce disparities.

MEASURES OF DISPARITIES

Inequality and disparities exist across societies, often due to historic discriminatory norms around economic class, gender, disability, age, and minority status defined on the basis of ethnic, linguistic, religious, or cultural characteristics. Each dimension is deserving of in-depth examination and significant in any evaluation of equity in higher education.

DEFINING UNDERSERVED STUDENTS

This report considers the following main equity target groups and characteristics:

1. Individuals from the lower income groups,
2. Gender,
3. Minority status linked to ethnic, linguistic, religious and cultural affiliation, and residency status,
4. Adult learners, and
5. People with disabilities.

The characteristics that shape inequality are not mutually exclusive. In fact, quite the opposite is true. The principal dimensions of inequalities often overlap in several ways and compound exclusion. For example, in many parts of the world, ethnic minorities tend to be more prevalent in rural areas and are commonly affected by poverty. Being a girl with a disability from a low caste in rural India is almost certainly the passport to a life of exclusion and discrimination. In practice, there is no universal definition of equity target groups, and

classifications vary across countries and continents or even within a country. In Australia, for instance, the categories are: students with disabilities, indigenous, low socioeconomic status, students from a non-English speaking background, students from regional and remote areas (also referred as 'regional'). A 2017 report notes that even within the latter category, "there is no typical 'regional student' and consequently there can be no single solution to multifarious challenges" (NCEHE 2017).

In Europe also, there is a common goal of increasing participation in higher education but no unified definition of underrepresented groups. Instead, this is left for each country to define, according to its specific social context (Eurydice 2015a). Nevertheless, some categories are common across many European countries and include socio-economically disadvantaged groups (low income groups, immigrant status, parents' low educational level), students with disabilities, gender and mature students (Eurydice 2018). With respect to national widening participation policies, very few systems in Europe set targets for specific groups; the majority prefer to set general objectives and mainstream their policy approach (Eurydice 2015a). This means that the monitoring of policies fails to provide specific data about underserved populations. Nevertheless, many of the European examples provided in this report can illustrate relevant good practices that can be applied to specific populations.

DEFINING COMPLETION RATES

Similarly, there is lack of consensus on how to define completion rates and student success. For instance, a report on "study success" in 35 European countries (EC/EAC 2015) revealed that the definition varies considerably across Europe. Examples include:

1. Completion: students succeed when they have completed their study and earned a degree.
2. Time-to-degree: students succeed when they have earned their degree within a set period (e.g., the nominal period plus one year).
3. Retention or dropout: students re-enroll in a program until they earn a degree successfully; students fail when they drop out before completing a degree.

Almost half of the countries in the EC/EAC 2015 place a high or very high policy priority on student success. Nevertheless, only 12 countries regularly report data on completion, and fewer report on retention, dropout rates or time-to-degree. Referring to previous work done in this area, the study stresses the need to (i) harmonize definitions and data collection in Europe to allow meaningful comparisons, and (ii) promote research to evaluate which policies are effective.

The EUA's study, *Trends 2015: Learning and Teaching in European Universities*, ("Trends 2015") queried institutions about fluctuations in their dropout rate. While most institutions reported that dropout rates remained roughly stable since 2010, there was a decrease among those offering the broadest range of student support services. Other factors may influence those data (e.g. admissions, financial aid, instruction), which the study did not test (Sursock 2015).

Eurydice, a 38-country education network managed by the Education, Audiovisual and Culture Executive Agency (EACEA) of the European Union, notes that, in most cases where completion and dropout rates are monitored, this is done without distinguishing students' profiles. Only ten countries look more specifically at under-represented groups, typically defined according to gender, age (mature students), socio-economic background and citizenship (Eurydice 2015b).

SCOPE OF DISPARITIES

Participation rates across the world have increased, but some systems have been better than others at widening participation. The following sections examine a range of examples from around the world.

Mexico and Canada

MEXICO

The rapid growth of the Mexican higher education system has led to diminishing disparities overall, as shown in Table 1, which presents estimates of enrollment rates by income groups over the past twenty years. The table also calculates the evolution of the disparity ratio, which is the enrollment rate of the top income quintile divided by the enrollment rate of the lowest quintile.

Table 1 – Disparities in Tertiary Education Enrollment Rates by Income Quintiles (1994-2014)

Year	Q1	Q2	Q3	Q4	Q5	Disparity Ratio
1994	5.2	3.7	7.0	12.7	32.2	6.2
2004	11.3	10.6	14.7	21.4	44.3	3.9
2014	15.6	15.5	21.4	28.0	46.0	2.9

Source: SEDLAC (CEDLAS and World Bank)

Mexico has also made progress when it comes to gender balance among students. In 1994, male students had a higher enrollment rate (12.5 percent) than female students (11.5 percent). The latest data available indicate that female enrollment has grown faster than male enrollment; in 2014, the rate for females was 26 percent, three points higher than male enrollment.

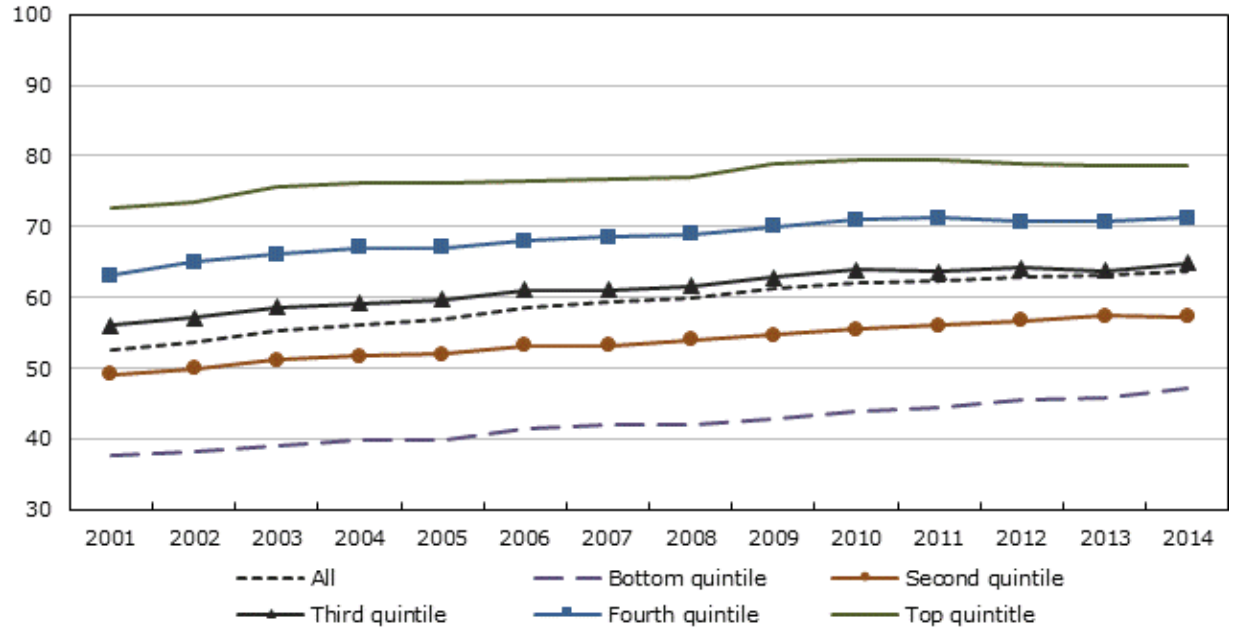
To increase participation, the Mexican government has relied on three complementary approaches. First, new public universities have successfully attracted students from underserved population groups. For example, the Technological University of Netzahualcoyotl targets students from marginal urban areas, and the Intercultural University of the State of Mexico targets indigenous groups. Second, it has encouraged the development of the private higher education sector, which today enrolls 30 percent of all students. By law, private institutions must offer full scholarships to at least five percent of their students. Third, the national scholarships program, PRONABES, supports about 300,000 low-income students every year.

At the same time, there is a concern that the overall progress in coverage may be hiding increased segregation across types of higher education institutions, with a higher proportion of low-income students being enrolled in the least prestigious institutions.

CANADA

The equity story coming out of Canada is quite positive. Longitudinal data released by Statistics Canada (StatsCan), the national statistics agency of Canada, give a detailed picture of the evolution of post-secondary participation by income quintile between 2001 and 2014 (Usher, 2017a). As Figure 2 shows, access to higher education increased for every income group, and the fastest increase was for the bottom income group. Participation is now close to 50 percent for young people from the lowest income quintile, as compared to the national average of 63.8 percent.

Figure 2: Enrollment rates by income quintile (percent) (2001-2014)



Note: The sample consists of 19-year-old youth matched with a parent who lives in one of the 10 provinces.

Source: StatsCan

Between 2001 and 2014, the enrollment gap between the highest quintile and the lowest quintile shrank 15 percent. A 2001 analysis of the disparity gap (enrollment rate of top quintile over enrollment rate of bottom quintile for Canada as a whole and for selected provinces) revealed two interesting findings: First, there is a fair degree of variation among provinces. Second, tuition fees do not seem to be a deterrent where student aid is available. For example, Ontario Province has higher participation and lower disparity between the highest quintile and the bottom quintile than Quebec, even though Ontario has significantly higher tuition fees (Usher, 2017).

Of enduring concern is the lower rate of attainment among indigenous people in Canada. The 2016 Census data indicate that, while the technical college attainment rate is about the same between indigenous and non-indigenous Canadians, the gap in university attainment between the two groups rose from 23 to 25 points between 2006 and 2016 (Usher, 2017b).

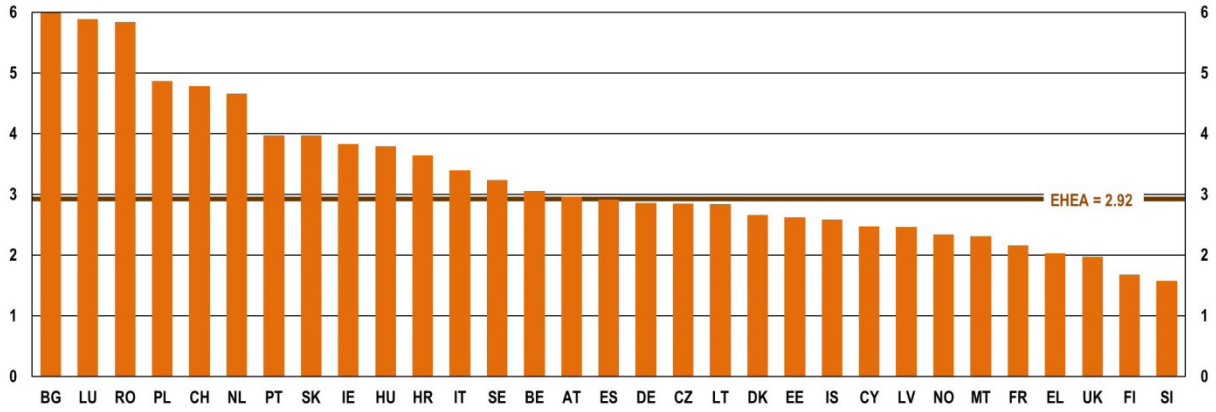
Europe

Europe-wide reports provide a snapshot of the extent of disparities in Europe (Eurydice, 2015b). While gender imbalances have diminished over time, there is now overrepresentation of women nearly everywhere at the undergraduate level. The imbalance is greatest by field of study: for instance, women are strongly underrepresented in engineering and similar fields, and men are underrepresented in teacher training and social services. “In nearly half of the countries, the share of over 30-year-old students is larger among female than male students” (Eurydice 2015b).

The trend is similar in OECD countries for which data are available. In the fields of science, technology, engineering and mathematics (STEM), young women represent less than 20 percent of entrants into tertiary level computer science programs and only around 18 percent of new students in engineering (OECD, 2017). As far as employment patterns are concerned, “men with low educational attainment have now higher unemployment ratios than their female counterparts, while unemployment ratios are similar for both sexes among the highly educated” (Eurydice 2015b).

The education level of students' parents has been demonstrated to affect their participation in higher education. Where data are available, children of 'medium educated parents' have a much lower chance to enter higher education than children of highly educated parents (Eurydice 2015b).[1] Among students whose parents have not completed higher education, participation is higher at non-university institutions than at universities" (Eurydice 2015b). The impact of parental education on their children's higher education prospects varies from a relatively small impact in Finland and Slovenia to a very strong impact in Bulgaria, Luxembourg and Romania.

Figure 3: Educational attainment by educational background of parents



BG	LU	RO	PL	CH	NL	PT	SK	IE	HU	HR	IT	SE	BE	AT	ES
5.99	5.89	5.84	4.87	4.78	4.66	3.97	3.97	3.83	3.80	3.64	3.40	3.24	3.06	2.97	2.92
DE	**CZ**	**LT**	**DK**	**EE**	**IS**	**CY**	**LV**	**NO**	**MT**	**FR**	**EL**	**UK**	**FI**	**SI**	
2.86	2.85	2.84	2.66	2.62	2.59	2.48	2.46	2.34	2.32	2.16	2.03	1.97	1.68	1.57	

Source: Eurostat, EU-SILC ad hoc module on intergenerational transmission of disadvantages (2011)

A forthcoming report by Eurydice focuses on the educational attainment of parent cohorts and draws the following conclusions: Learners from medium-educated families are more likely to enter a higher education system if it is in expansion; "new entrants with parents having at most lower secondary education are under-represented in all countries. Unless there is a sizeable proportion of a low educated population in the parents' cohort, their participation in higher education remains marginal." (Eurydice 2018).

In nearly all European countries, an "immigration background" (a broad term that includes persons who have migrated from another country, or in some cases the children or descendants of immigrants) is negatively associated with higher education attainment. Children of immigrants tend to quit education at an early stage and not enter higher education (Eurydice 2015b).

Undergraduate completion rates in Europe range from 48 to 88 percent, with the lowest rates in systems with open access (Eurydice 2015b). In francophone Belgium, for instance, where there is no examination at the end of high school and no selection to enter universities, the pass rate at the end of the first year of studies is 35 percent. In such open systems, dropping out during the first year serves as the *de facto* selection mechanism (EC/EAC 2015) and implies that less prepared student groups are less likely to succeed. However, since higher education institutions in many countries are not allowed to collect social background information on students, it is difficult to document precisely how this affects students from underrepresented categories. An EUA report found that "non-traditional students tended to drop out of university disproportionately and that the reasons for this appear to go beyond those that are purely academic" (EUA 2017).

1 Highly educated parents are defined as those where at least one has completed tertiary education. Medium educated parents are those with upper secondary or post-secondary non-tertiary education.

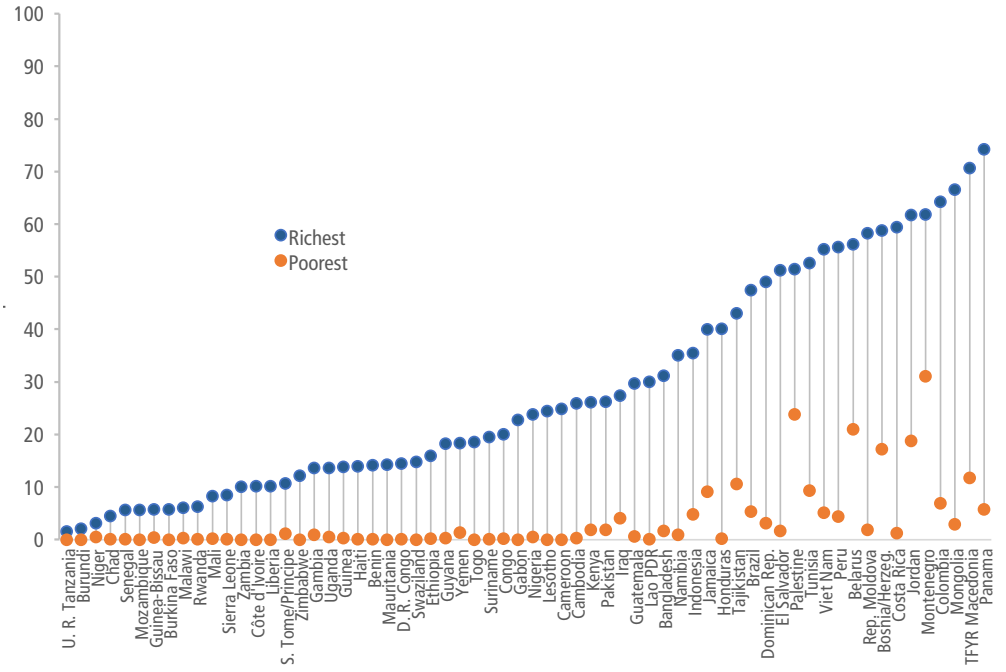
In general, higher levels of education are associated with lower unemployment rates: For those with lower secondary education, it stands at 17.7 percent; for those with post-secondary non-tertiary education, it is 10.4 percent, "while it is 7.6 percent for the highly educated with tertiary education" (Eurydice 2015b). There are, however, a number of countries (e.g. Albania, Armenia, Bosnia and Herzegovina, Cyprus, the Former Yugoslav Republic of, Macedonia, Georgia, Greece, Moldova, Montenegro, Portugal, Romania, Turkey) where a higher level of education has not protected graduates from unemployment and job insecurity, notably during the brunt of the financial crisis (Eurydice 2015b).

Developing Countries and Emerging Economies

In developing countries and emerging economies, UNESCO statistics indicate that all countries have significantly increased female participation in higher education. In several regions, including, Central Asia, the Middle East and North Africa, as well as Latin America and the Caribbean significantly more women than men are now enrolled in higher education. The two outliers are South Asia and Sub-Saharan Africa, where there are approximately 62 female students for every 100 male students, and in South Asia, the proportion is 74 percent.

The global expansion of higher education over the last decades does not necessarily mean that higher education systems have become equally accessible to all social groups. Increased higher education participation may result from a greater proportion of students from families with a relatively high socio-economic status. To illustrate this situation, Figure 4 shows the gap in enrollment rates between the richest quintile and the poorest quintile in selected countries, and Table 4 summarizes equity data for various regions of the world, based on two key measures of disparity: the mean disparity ratio (enrollment rate of the top income quintile divided by the enrollment rate of the lowest quintile) and the range of disparity ratios from best to worst country in each geographical region.

Figure 4: Enrollment Gap between the Rich and the Poor



Source: 2017 Global Monitoring Report (UNESCO)

Table 4: Disparities by Region

Country Groupings	Mean Disparity Ratio	Range	Average Enrollment Rate in 2014
East Asia	16.0	1 - 61	51.6
Eastern Europe and Central Asia	3.5	1 - 9	50.5
Latin America and the Caribbean	27.0	3 - 100	39.6
Middle East and North Africa	28.2	7 - 89	23.9
South Asia	21.1	7 - 45	15.6
Sub-Saharan Africa	99.3	4 - 200	12.8

Source: Salmi (2017)

Eastern European and Central Asian countries stand out with the lowest degree of inequality overall, reflecting a positive legacy of socialist policies that emphasized quality primary and secondary education for all. After the fall of the Berlin Wall, however, Eastern European countries expanded participation mainly through private higher education institutions, which tended to enroll less qualified students. Public universities have continued to cater to the elite.

In the developing world, South Asia is the most homogenous region, owing to the fact that the region comprises a small number of countries at relatively similar levels of higher education development. Sub-Saharan Africa shows the worst pattern of inequality, reflecting the elitist nature of its universities.

While Latin America has the second worst level of disparities by income groups after Sub-Saharan Africa, the average data hide significant differences in policies and equity outcomes. Comparing Argentina, Brazil and Chile sheds light on the relative impact of various access and funding policies. Argentina has an open access and free tuition policy; Brazil has a restricted access and free tuition policy; and Chile has both restricted access and high tuition fees. The natural expectation would be that Chile would display the highest degree of inequality. But, in reality, Brazil is the most regressive country, followed by Argentina, and then Chile. As revealed by Table 5, which shows the enrollment rate in each country for the various socio-economic groups, Chile has the highest enrollment rate for the poorest two quintiles.

Table 5: Enrollment Rates by Income Quintile in Argentina, Brazil and Chile

Quintile	Argentina	Brazil	Chile
Q1	18.0%	5.0%	21.2%
Q2	25.3	6.3	26.4
Q3	29.5	11.6	26.0
Q4	38.2	20.7	37.5
Q5	56.6	47.0	61.6

Source: SEDLAC 2014

Data on access to the University of São Paulo, Brazil's most prestigious public university, helps to understand the mechanisms at play. The great majority of candidates (86 percent) who take the highly competitive entrance examination ("vestibular") come from public high schools; only 14 percent of the candidates attended private high school. Based on exam results, 70 percent of students admitted come from private secondary

schools, versus 30 percent from public schools. Thus, the sons and daughters of high-income families with strong cultural capital, who can afford to study in the expensive, high-quality private secondary schools, are better prepared to gain access to the top public universities of the country, which are tuition-free (Rodriguez et al. 2008).

In the case of Chile, the more equitable enrollment pattern results from the fact that, although all students pay high tuition fees in both public and private universities, the country has a comprehensive system of well-targeted grants and student loans to protect low-income students. In fact, a benefit incidence analysis of public expenditures in Chile's tertiary education system clearly demonstrated that the student aid subsidies are distributed in a progressive way, whereas the public funds allocated directly to the universities are highly regressive (OECD, 2009).

EQUITY PROMOTION POLICIES: WHAT WORKS

Research by Bassett and Salmi shows that the most effective equity promotion policies to increase higher education opportunities for disadvantaged students are those that combine financial and non-financial measures (Malee Bassett and Salmi, 2014). In the first instance, there is strong evidence that well-targeted and efficiently managed financial aid can be instrumental in reducing financial barriers to tertiary education. Second, many countries and institutions have implemented policies to increase access—through outreach and bridging programs, reformed selection procedures and/or preferential admission programs, special institutions and programs targeting underprivileged groups—and improved completion rates through effective retention programs.

This chapter starts with considerations of how policies are developed at the national and institutional levels, and incentives for implementing them. This is followed by a discussion of financial aid, admission practices, retention programs and employability.

THE DEVELOPMENT OF WIDENING PARTICIPATION POLICIES AT THE NATIONAL LEVEL

Ministries, higher education institutions and other actors (e.g., NGOs) contribute to the definition of underserved student categories and the development of widening participation policies. Exactly how this is done varies greatly by country.

EUROPE

In Europe, the relevant change agents are the ministries responsible for higher education, the higher education institutions and their representative bodies and the national student unions. The principal change agents at European level include the European Commission, the Bologna Follow-Up Group (BFUG) and many European associations and networks, including the European Student Union.

For multiple reasons, it is difficult to generalize across Europe about the respective roles of ministries, higher education institutions and other actors in developing widening participation policies. The strength of the national associations of higher education institutions and student unions vary: where they are strong and well organized, they are more likely to influence, initiate or promote policy development. There are also wide variations with respect to different political traditions—and the extent to which consultation is valued—as well as vastly different degrees of centralization and institutional autonomy in higher education (Pruvot and Estermann 2017).

The Nordic countries and the British Isles typically develop policies in a collaborative fashion, with ministries, higher education institutions and other agencies sitting around the table. It is also the case that ministries may sometimes impose policies on institutions without taking into account their views. In some Eastern and Southern European countries, university leadership often has considerable influence over national-level policy in smaller European countries.

An example of a top-down initiative is England's Office for Fair Access (OFFA), the body authorized to oversee universities' implementation of government policy on increasing access to higher education. OFFA negotiates "access agreements" with institutions to set tuition fees, as well as measures to safeguard fair access and enrollment targets. The agreements stipulate the scholarships to students from under-represented groups and outreach activities to attract their applications. If OFFA is not satisfied that the agreement is setting challenging targets, the institution is then unable to charge the maximum allowable fees.[2] \

An examination of national policies in Europe revealed that 13 of 47 higher education systems have steering documents that aim to widen participation, but without concrete measures; 32 of the systems include concrete measures in their steering documents; and a small number of countries combine both approaches (Eurydice 2015b).

BOX 1: A COMPREHENSIVE APPROACH TO EQUITY POLICY IN IRELAND

Ireland has one of the most comprehensive national plans related to under-represented groups. The Ministry of Education, Higher Education Authority, and higher education institutions co-define enrollment targets. A national plan outlines five objectives: institution-wide approaches to access; enhancing access through lifelong learning; investment in widening participation; modernization of student support; and widening participation for people with disabilities. Quantitative objectives are set for specific group of students entering and completing higher education. (Eurydice 2015a) Each institution sets its own numerical targets, in consultation with the Higher Education Authority (HEA).

Another example of joint action is through Ireland's centralized admission process. Aside from the regular admission route, three supplementary tracks target mature students, students with disabilities (Disability Access Route to Education, DARE) and those with a disadvantaged socio-economic background (Higher Education Access Route, HEAR). Universities and institutes of technology decide whether to participate and how many students to admit through these pathways. An evaluation revealed the progression of students admitted through DARE and HEAR to be similar to that of other students.[1]

1 An evaluation of Dare and HEAR pathways is available at: http://www.iua.ie/wp-content/uploads/2014/02/HEAR-DARE-Evaluation-Report.pdf

AUSTRALIA

Australia stands out as one of the few OECD countries with an explicit national policy for widening access. The Australian Higher Education Equity Program (HEEP) has federal funding to encourage higher education participation among six disadvantaged groups. Institutions receive funding for equity programs and are rewarded for the numbers of students they enroll from those groups, as well as the students' success and retention. Funding for HEEP almost doubled in 2005 and continues to reward institutions' performance related to access and support of underserved students.[3]

AFRICA

Higher education policy in post-apartheid South Africa identified the need for the composition of the student body to progressively reflect the broader society. The policy states: "A major focus of any expansion and equity strategy must be on increasing the participation and success rates of black students in general, and of African, Colored and women students in particular, especially in programs and levels in which they are unrepresented"

2 See www.offa.org.uk and national performance indicators which show the scale of the problem are at www.hesa.ac.uk/pi/summary_0203.htm

3 Details of the Australian HEEP can be found at: www.dest.gov.au/highered/programmes/heep.html

(Department of Education 1997). In 1993, 40 percent of the student body was African and 57 percent male; in 2014, it was 70 percent African and 42% male.

Ethiopia has several categories of underserved students that institutions are required to enroll, including women, who receive support through a dedicated gender office. Lack of adequate resources, however, often means that the remainder of students do not receive special attention.

Tunisia opened a number of universities in the interior of the country as a stopgap measure to occupy unemployed rural youth, but lack of resources and poor teaching quality has plagued some of them. The situation in many parts of Africa, involving a four- to eight-fold increase in participation, has been described as the massification of institutions, rather than massification of the system (Mohamedbhai 2017).

THE DEVELOPMENT OF WIDENING PARTICIPATION POLICIES AT THE INSTITUTIONAL LEVEL

The following discussion focuses on Europe and is based on the Trends 2015 survey, which showed that, at the institutional level, 40 percent of respondents rated widening access and participation as highly important. However, the range of respondents stating that they did not have information about some key socio-economic characteristics was between 20 percent and 40 percent. Of greatest concern was the lack of information about ethnic minority groups, in part because collecting such information is illegal in a number of countries (Sursock 2015).

Diversification of the student body has been central to institutional outreach strategies, and includes international recruitment. The 2003 meeting of the Transatlantic Dialogue—a biannual gathering of Canadian, European, and U.S. higher education leaders—focused on pluralism. When asked to define the term pluralism, North American leaders referred to race, gender and ethnicity, while their European counterparts thought that internationalization was an important dimension (Green and Barblan, 2004).

Data from the *Trends 2015* study revealed a positive correlation between institutions located in countries suffering from population decline and targeted recruiting strategies. There are two implications to these results. First, widening participation is not always simply a social goal but can also be a matter of institutional survival. Second, by focusing on part-time and mature students, institutions are increasing access via the lifelong learning path; this is confirmed by other *Trends 2015* results that reveal the continuous progression of lifelong strategies in Europe (Sursock 2015).

INSTITUTIONAL FUNDING TO INCENTIVIZE WIDER ACCESS

Many developing countries include the expansion of higher education coverage in their national policies, but they rarely have specific targets for students from underrepresented groups and rarely put in place specific instruments to help them in a focused way beyond the regular student aid mechanisms (see next section).

STUDENT SCHOLARSHIPS

Colombia is a notable exception. In 2015, the government set up a new program, Ser Pilo Paga ("It pays to be a good student"), under which the best high school students from the lowest income quintile get a full scholarship to study at any accredited public or private university.

STUDENT SUPPORT

In Europe, very few higher education systems have incentives focused on widening participation, and the admission systems (based on open access, high school grades or entrance examinations) are not friendly to underserved populations (cf. Section 3.5 for further details). According to Eurydice, "Incentives for higher education institutions to admit non-traditional students exist in roughly a third of the higher education systems" (Eurydice 2015b). The report singles out Ireland and the United Kingdom for having established a funding

formula that is "deliberately used to remove a disincentive to higher education institutions to widen participation" and that reflects "an acknowledged reality that there are additional costs in recruiting and supporting students from under-represented groups. This is why higher education institutions with more of these students receive additional funding" (Eurydice 2015a).

STUDENT OUTCOMES

Funding formulas increasingly use performance indicators related to study success, and a growing number of European countries are now tracking graduate employment. Where institutional autonomy is strong, "performance agreements represent a more systematic approach towards improving the employability of graduates—together with other performance indicators such as completion rates" (Eurydice 2015b). However, a 2015 study on completion warns that performance-based funding mechanisms need to be carefully designed to avoid unintended consequences. The same applies to performance incentives in financial aid to students (EC/EAC 2015).

TEACHING AND LEARNING

There is a growing trend across Europe to provide supplemental funding to improve the general provision of teaching and learning through teaching innovation, improving student to faculty ratio, enhancing learning infrastructure, and other approaches. Evaluation of the impact of these measures, which are not necessarily targeted to underserved students, is not yet available (EC/EAC 2015).

STUDENT AID FOR OVERCOMING FINANCIAL BARRIERS

Aside from direct incentives to institutions, another arena for government intervention is student financial aid. The basic principle of equitable higher education financing is that no academically qualified student should be denied the opportunity to access and complete higher education for lack of financial resources, especially in the last three groups of countries. Strategies among higher education systems worldwide can be divided roughly into four main groups (Salmi, 2017):

4. A small number (about 10 countries) of well-funded systems that rely almost exclusively on public funding (more than 1.5 percent of GDP) and public provision (more than 90 percent of enrollment). These include the Gulf countries, the Nordic countries, Saudi Arabia, Scotland, Singapore, and Switzerland;
5. A small number (less than 10 countries) of predominantly public systems that are relatively well funded through a combination of public resources and student fees with appropriate student aid. Examples in this category are Australia, Canada, England, Hong-Kong (China), Iceland, the Netherlands, and New Zealand;
6. Mixed provision systems (more than 25 percent private enrollment), relatively well funded through public resources with moderate to high levels of costs borne by students at both public and private institutions. These include Chile, China, Japan, Jordan, Malaysia, South Korea, and the United States; and
7. Public and mixed provision systems that tend to be insufficiently funded overall (most countries in the rest of the world).

GRANTS AND SCHOLARSHIPS

Governments all over the world rely on grants and scholarships as non-reimbursable financial aid instruments that can cover both living and tuition expenses. When student aid resources are scarce, grants and scholarships should be need-based, which requires efficient systems for targeting and managing student aid. Depending on the specific equity gaps, governments may target grants and scholarships to reach lower income students, students from certain ethnic minority groups, rural students (who are less likely to enroll in higher education compared to urban students), women, or students with a disability.[4]

4 For an analysis and recommendations on funding students with disabilities, cf. HEA 2017.

While many nations opt to fund only students enrolled in public higher education institutions, those with a mixed provision system, often provide scholarships to both public and private institutions. Many higher education institutions use tuition fee waivers or subsidies as a form of student financial assistance. Tuition fees can be implemented on a sliding scale based on family/individual income. Exceptions may be made for groups that are under-represented in higher education, for example students from ethnic minorities, rural students, or women. It is also possible to find a number of private higher education institutions established with the mission of targeting low income and/or minority students and offering a quality education at low or no cost. Below are examples of such institutions:

Uniminuto in Colombia is an open access, private university created in 1990 by an Eudist priest with the explicit purpose of offering good-quality education to young people from low-income families living in disadvantaged areas. After setting up the main campus in the remote outskirts of Bogotá, he went on to establish branches in a number of marginalized urban and rural zones. Uniminuto has experienced spectacular growth, evolving into a university system of 13 campuses enrolling more than 130,000 students in 2017.[5] In complement to its low tuition fees, the university spends about 28 percent of its revenues on student aid (scholarships, subsidized loans and tuition discounts).

CIDA City Campus in South Africa was founded by social entrepreneur Brady Blecher in 2000 as the first low-cost university targeted to needy Black students. Offering at first only a bachelor's degree in business administration, the university gave full scholarships to all qualified low-income students, covering tuition and living expenses. While quite successful during its first years—more than half the students came from disadvantaged backgrounds and most found a job after graduating—the university has faced serious financial difficulties since the departure of its initial backer in 2007. This experience illustrates the importance of establishing a sustainable funding model.

Tsiba Education is another example from South Africa. Focusing on business studies, this non-profit, private institution was established in 2004 in Cape Town with the help of corporate sponsors. Tsiba recruits financially and educationally disadvantaged students who are provided with full scholarships and expected to "pay it forward" by transferring knowledge and skills to their communities. It has an excellent record of placing its graduates into employment.

University of the People, founded in 2009 by Shai Rashef, an Israeli entrepreneur, is a non-profit, accredited online university offering tuition-free programs to about 4,000 students from 180 countries.[6] In reality, students pay exam fees amounting to U.S. $2,000 for an associate degree and $4,000 for a bachelor's degree. Due to partnerships with several foundations and scholarship funds, University of the People gives full scholarships to students in need of financial aid.

STUDENT LOANS

Student loans, considered to be a more sustainable form of financial aid than grants and scholarships, exist in one form or the other in more than 70 countries (Chapman et al. 2014; Salmi, 2017). While student loans are usually managed and financed by national agencies, in some cases higher education institutions administer their own loans. In Chile, for instance, the technical institute DUOC offers subsidized loans to some 100,000 students, in partnership with the International Finance Corporation of the World Bank and a local commercial bank. In northern Mexico, the establishment of a provincial student loan agency in the mid-1990s, ICEES, made the state of Sonora's main public university, *Universidad del Estado de Sonora*, one of the first Mexican public universities to charge tuition fees without adversely affecting equity (Salmi, 2017).

To be successful, student loans require a lean administrative setup, low subsidies and an effective recovery mechanism (preferably one that is income-contingent). If funding is scarce, there is greater need for targeting specific groups of students. Targeting can become an issue if there is "leakage," that is, when the social characteristics of the selected beneficiaries do not correspond to the planned distribution of recipients.

5 http://www.uniminuto.edu/

6 https://www.uopeople.edu/about/uopeople/

International experience shows that, in order to avoid high levels of repayment default, student loans should be given only for studies at higher education institutions with a recognized track record in the quality and relevance of their academic programs. Many countries make accreditation a condition of institutional eligibility.

Student loan models can be categorized by their repayment terms. They also vary on other important dimensions, such as the source of capital, the type of expenses covered, student eligibility rules including applicability to private and distance institutions, and the level of subsidy. Three main types of student loan models exist around the world: (i) direct loans—mortgage type, (ii) guaranteed and shared-risk loans mortgage type, and (iii) universal income-contingent loan systems.

Public funding (direct loans—mortgage type). This is the most common approach. A government agency funds and manages student loans that are repaid monthly after graduation. The main drawback is that public resources are needed to start the scheme and bring it up to scale. To maintain the financial sustainability of these schemes, the administrative costs, the interest subsidy and the level of default must be kept at a minimum. Many of these schemes end up being financially unsustainable because of high administrative costs, interest rate subsidy and default. There are exceptions, however, as the Colombian experience shows (see discussion of ICETEX, below).

Private funding leveraged by the government (guaranteed and shared-risk loans—mortgage type). To reduce administrative costs and limit public funding outlays, many governments work in partnership with private banks. The government may offer an interest rate subsidy, and generally provides a guarantee for default; the private banks raise funds to finance the student loan themselves. This approach presents the advantage of mobilizing private sector resources with limited public financial contributions.

Large-scale programs of this nature have had a mixed record, however. In 2000, Canada went back from a shared-risk system to a traditional public funded direct loan scheme because the private banks were not diligent in seeking repayments from graduates and. Similarly, in 2012 Chile eliminated the shared risk program (CAE) that it had introduced in 2006 to expand loan opportunities for students enrolled in the rapidly growing private sector because of unaffordable debt levels for many of the graduates. Indeed, the student protest movement that erupted in 2011 was partly triggered by the growing loan burden of students benefitting from the CAE loan system, which did not have an income-contingent provision.

In the United States, according to data from the 2015 Federal Aid Supplements, only 20 percent of borrowers who started their postsecondary education in the 2003-04 academic year had fully paid off their student loans without defaulting and 27 percent had defaulted on at least one loan. Econometric calculations have shown that the repayment burden with mortgage loans can be very high for low-income graduates—as much as 80 per cent for those in the lowest parts of the income distribution (Chapman et al. 2014).

Universal income-contingent loan system (Australia, New Zealand, United Kingdom). Such systems can, in theory, achieve a better balance between effective cost recovery and risk to the borrower. Administration is generally simpler and cheaper under such schemes because loan recovery is handled through existing collection mechanisms, such as the income tax administration or the social security system. Income-contingent loans are also considered to be more equitable and satisfy more fully the ability-to-pay principle, since graduates' payments are in direct proportion to their income.

In conclusion, traditional, mortgage-type student-loan schemes are vulnerable by design. Without an income-contingent provision, times of economic crisis are bound to cause repayment difficulties, as unemployment rises and incomes stagnate. International experience shows that income-contingent loans—for example those designed after the Australian and New Zealander Higher Education Contribution Scheme (HECS) model—tend to have higher repayment rates. Not only are they more efficient in terms of loan recovery through the national tax system, but they are also more equitable since graduates pay a fixed proportion of their income and are exempted from repaying if they are unemployed or their income is below a pre-determined ceiling. Below are examples of different approaches to student loan programs developed by Colombia, Australia, New Zealand, and Brazil.

COLOMBIA'S ICETEX STUDENT LOAN PROGRAM

In 1950, Colombia created the first student loan institution in the world, Instituto Colombiano de Crédito Educativo y Estudios Técnicos en el Exterior (ICETEX).

The institution provides subsidized loans to students from the poorest families, ethnic and racial minorities, and students with a disability.

ICETEX provides different payment options available to borrowers in order to ease repayment burdens by linking the size of payments to the income of graduates. For instance, the poorest students have a zero real interest rate during the loan period. The repayment schedule reflects the evolution of the salaries of young graduates, which makes it easier for borrowers to pay back their loans.

Since the mid-2000s, ICETEX has benefited from a strong and innovative leadership team, who have been able to mobilize additional resources from government and multilateral donors. As a result, it managed to extend coverage to about 20 percent of the total student population, focusing on students from the lowest socioeconomic groups. This is the highest student loan coverage rate in Latin America, and one of the best in the developing world.

ICETEX has also improved its collection record—reducing overdue loans from 22 percent in 2007 to 13 percent in 2009— and modernized its management practices, bringing operating costs from 12 percent in 2002 to 3 percent in 2010.

The institute maintains partnerships with universities to provide financial as well as academic and psychological support to loan beneficiaries, which has greatly reduced their dropout rates, compared to other students. To help students from the lowest income groups, ICETEX supplements loans with scholarships to cover living expenses (OECD and World Bank 2012).

The Province of Antioquia has set up an innovative scheme involving a public-private partnership bringing together the local authorities (provincial department of education and municipalities), a group of private universities and a number of private sector employers to offer qualified, low-income students who could not find a place in a public university the opportunity to study in one of the local private universities. The students get a scholarship equivalent to 75 percent of the tuition costs and receive a loan from the National Student Loan Agency (ICETEX) for the remaining 25 percent.

INCOME CONTINGENT LOANS IN AUSTRALIA AND NEW ZEALAND

In the late 1980s, Australia and New Zealand both increased student fees, which had been exceptionally low, and introduced income-based student loan programs. While the two countries' approaches differed, they achieved similar results in significantly improving equity.

In 1988, Australia introduced the Higher Education Contribution Scheme (HECS). Faced with prospective widespread student opposition to tuition fees, policymakers used public funds to pay the fees while students were enrolled. Students participating in HECS were then obligated to repay these fees after completing their tertiary education as a percentage of their incomes, and students with below average incomes were exempted from repayment. HECS applies only to fees, not living expenses.

Beginning in 1990, New Zealand imposed fees at public institutions that students and families paid upon enrollment. As of 1992, students could borrow to cover the cost of these fees, as well as a substantial amount of living expenses. Repayment occurred through the income tax system based on a percentage of income once students completed their education.

New Zealand and Australia have moved in different directions since they adopted income contingent student loan schemes. New Zealand began with a more market-based approach in which virtually all borrowers (who then constituted a small share of students) repaid on the basis of income, with interest rates slightly below market levels. Over time, New Zealand has moved away from market-based principles by increasing subsidies, including exempting more low-income students from making repayments and forgiving interest on most

loans. As a result, borrowing has grown substantially over time. The overriding policy concern now is that high debt levels are leading an increasing number of graduates to emigrate from New Zealand to avoid their loan repayment obligations. The government has responded by making repayments interest-free for borrowers who remain in New Zealand beginning in 2006.

Australia's HECS system, on the other hand, created a public expenditure challenge at first, as a growing number of students enrolled in higher education without having to pay fees up front. To reduce budget pressures, Australia moved in 1997 toward the market by reducing HECS subsidies and introducing three bands of HECS tuition fees, as well as reducing the level of income exempted from HECS repayment. In addition, more market-based loan programs have been developed for the more than one-quarter of students who do not participate in HECS, including growing numbers of foreign students and domestic students enrolling in fields of study not covered by HECS. In 2016, the government closed the loophole that allowed Australians living abroad to leave their debt unpaid while being away from Australia. Estimates indicate that, as a result of that loophole, as much as A$800 million have remained unpaid since the launch of the student loan program in 1989 (Chapman et al. 2014; Salmi and Hauptman 2006).

BOX 2: BRAZIL'S PROUNI AND FIES

The Universities for All program (ProUni) and Fundo de Fianciamento Estudantil (Fund for Student Financing, or FIES)[1] are two federal programs that have contributed significantly to the expansion of the Brazilian higher education system, in which 80 percent of students are enrolled in private institutions.

Under ProUni, launched in 2006, the Brazilian government uses tax incentives to "buy" places in private universities for deserving, academically qualified low-income students who were not admitted in the top public universities because of the limited number of places. ProUni is a voucher-like program that subsidizes low-income students, whereas FIES is a student loan program run by the Government of Brazil.

As a result of both programs, higher education participation has significantly increased, especially in private institutions: Between 2010 and 2014, enrollment grew by more than one million, and the number of FIES contracts increased from 76,000 to 732,000 (862 percent). In 2014, contracts signed with FIES constituted 11.3 percent of total enrollment in private higher education institutions (Rama 2017).

The second effect of these public funding programs has been on the configuration of the private higher education sector. Public funding for students enrolled in private higher education institutions, much them for-profit institutions, has contributed to the consolidation of large educational firms. Trading publicly on stock exchanges and attracting international investors, business groups working in higher education in Brazil account for around one-third of the total enrollment in the private sector (Sampaio 2014).

In sum, the growth of higher education enrollment in Brazil at the beginning of the 21st century occurred during a strong process of privatization and commodification (Sampaio 2014). Although federal universities have seen a significant increase in enrollment, the public sector (federal and state) accounts for only a quarter of total enrollment in the higher education system.

It is within this framework of the real increase in the number of students in post-secondary education, and intense privatization, that Brazil's higher education system faces four main challenges: 1) maintaining the growth rate of enrollment; 2) increasing the effectiveness of the system to promote student retention, reduce the dropout rate and increase the completion rate; 3) improving access mechanisms; and 4) recognizing the diversity of the system and broadening the notion of quality in institutional evaluation processes (Marcelo Knobel 2017).

1 The candidate for funding must have a gross monthly household income per capita of up to three minimum wages, about US $880 in 2017.

ADMISSION POLICIES AND PRACTICES

Widening participation involves designing student pathways from secondary school to higher education. Aside from a variety of mainstream admission systems, many countries have put in place alternative pathways, such as recognition of prior learning, and policies requiring that certain information be made available to prospective students.

Points of Access to Higher Education

Upper secondary school leavers wishing to enter higher education are required to show that they have completed their schooling successfully. The way this is assessed varies from those countries that take into account secondary school records to those that require students to sit national examinations. National examinations are often controversial and blamed for reproducing social hierarchies. Brazil is a case in (cf. Box 3)

BOX 3: THE NATIONAL SECONDARY EDUCATION EXAMINATION IN BRAZIL

In Brazil, student access to higher education depends on the results of entrance exams. The most widely known of these, which offers access to federal universities and public funding—via ProUni or FIES in private institutions—is the National Secondary Education Examination (ENEM in Portuguese). Created in 1998 to evaluate secondary education, the examination became a mechanism for entrance into higher education in 2009. As such, ENEM has become a significant gatekeeper. There are few public and private institutions today that do not use the results of ENEM to either replace or supplement their own entrance examinations.

In 2014, ENEM reached a record number of subscribers: More than 9.5 million individuals enrolled to take the exam, the same net enrollment as the gao kao in China, where the population is seven times larger and there are four times as many higher education students.

Data from 2014 show the majority (58 percent) who sit for the ENEM are female, 70 percent are below 24 years old, 85 percent are studying in public schools and 76 percent have a family income of up to two minimum wages. Of the students who actually took the exam, there is a correlation between the grade obtained in the exam and family income: the lower the income, the lower is the likelihood of attaining the threshold of 450 points and the higher the likelihood of failing the writing test. In the family income bracket of up to one minimum wage, less than half (45.7 percent) of the students achieved 450 points. Among the students that obtained 450 points or more and did not obtain zero in the writing, 72.8 percent have a monthly family income of up to three minimum wages.

Not surprising, ENEM is controversial. While some perceive it as a breakthrough in the educational system, functioning to unify nationwide entrance standards, others consider it an amplifier of the inequalities that characterize the educational system.

Source: Marcelo Knobel, communication to the authors (2017)

The joint OECD/World Bank review of the Chilean higher education system found similar results regarding the negative influence of the national university admission test, the Prueba de Selección Universitaria, or PSU.

> "…this admission system produces an unequal distribution of tertiary places between socio-economic groups. Pupils from municipal schools and poorer households are much less likely than pupils from private schools and richer households to pass the PSU. If they pass, they are less likely to achieve the higher scores that unlock student support and give access to the best universities" (OECD, 2009, 42).

Admission to higher education is sometimes through a central admission system (or a web portal), which invites students to express their choice of institutions and study programs. In countries with different types of institutions (e.g., universities and institutes of technology), the central admissions system generally filters applicants according to their upper secondary school achievements and sends them either to universities or to other types of institutions, depending on the type of examination or the mark they received on their final examinations. Unless corrective actions are taken, these systems usually reproduce existing social hierarchies.

According to Eurydice (2015b), widening participation during the admission phase in Europe is usually addressed through two approaches that are often combined:

- *Increasing overall participation* by, for instance, offering higher education free of charge, providing grants and loans to all students, expanding the number of university places, providing funding for counseling and student facilities.
- *Targeting certain categories of underrepresented students* through such measures as affirmative action, specific admission pathways, reducing or waving tuition fees and providing financial aid.

Where institutional autonomy is strong, as in the United Kingdom, government policy takes the form of incentives and penalties to enforce widening participation objectives. In England, as discussed earlier (cf. Section 3.1), the Director of Fair Access requires the institutions within the highest fee band to sign an agreement setting out how they will promote widening participation. In Scotland, "the Scottish Funding Council is investing just under £40 million of additional funding over four years to support widening access and universities have committed to deliver 727 new widening access places in 2014 to increase the proportion of students entering Scottish universities from disadvantaged and challenging backgrounds" (Eurydice 2015b).

It should be noted, however, that institutional autonomy in Europe varies greatly. In all eight cases covered by the 2017 EC/EAC study, governments limited the discretion of institutions to decide on the mix of their student body. Most institutions queried did not wish to have more autonomy because of the cost of setting up institutional admission processes. The study concludes that standardized admission reduces transaction costs for higher education institutions (EC/EAC 2017a).

Affirmative Action

Affirmative action is an area of policy directed toward creating differential admission processes to promote equal opportunity. While it has experienced a backlash in the United States, it has received increased attention in many parts of the developing world. Below are examples of affirmative action programs in India, Malaysia, Brazil, and France.

INDIA

India has by far the most elaborate affirmative action system in the world, with quotas for members of the scheduled castes and scheduled tribes—the two most disadvantaged groups in society—absorbing half of all the seats in some of its public universities. A study examining the effects of quotas for disadvantaged castes and women at 200 engineering colleges found that the affirmative action program had indeed increased college attendance for the targeted students, especially at the prestigious Indian Institutes of Technology

(Bagde et al. 2016). Contrary to the widely held belief that affirmative action puts beneficiaries into academic programs for which they are not sufficiently prepared, the targeted students assessed in the study had similar academic results to other students.

MALAYSIA

Malaysia initiated the largest-scale affirmative action program in higher education after the 1969 race riots (Lee 2012). As part of the New Economic Policy launched in 1971, the "Bumiputras" (Malays) were given preference over ethnic Chinese and Indian groups, with a quota of about 55 percent of available places and privileged access to scholarships. As a result, the number and proportion of Malays enrolled in higher education have grown rapidly. In 1970, the ethnic distribution of university enrollment was 40 percent Bumiputra, 53 percent Chinese and 7 percent Indian. By 2003, the proportions were 63 percent, 32 percent and 5 percent, respectively. However, thirty years after the policy was introduced, labor market results of the Malay group were weak, raising questions about a possible trade-off in academic quality in the affirmative action program.

> "Although the quantity of tertiary-certified Bumiputras has grown steadily, predominantly through public institutions where racial quotas are enforced, available literature and this study's empirical enquiry find evidence that shortcomings in the quality of Bumiputra public institute graduates severely diminish the efficacy of affirmative action. Unemployment rates of the degree-holding workforce have risen, disproportionately among Bumiputra, and significantly due to deficiencies in general criteria, such as language and communication skills and self-confidence" (Lee 2012, 21).

In recent years, the affirmative action program has created a backlash among the Indian community. Its representatives have accused the Government of hampering the advancement of Indian Malaysian students and called for more places for Indian students (Bernama 2017).

BRAZIL

In Brazil, a number of public universities established their own form of affirmative action program starting in the early 2000s. The University of Campinas (UNICAMP) is part of the state of São Paulo's higher education system and one of the top research universities in Brazil, and has introduced two affirmative action initiatives.

UNICAMP launched the Program for Affirmative Action and Social Inclusion (PAAIS) in 2005. It uses a bonus system, adding points to the final score of the entrance exam for applicants that graduated from public high schools, with an extra bonus if those applicants also declared themselves as black or native Brazilian. The design of the program is meant to compensate for some deficiencies in the previous education of the applicants coming from the public high schools. .A preliminary evaluation of the program revealed that the beneficiaries performed relatively better than high-income students selected through the regular admission, showing that "it is possible to accommodate affirmative action programs and merit criteria when recruiting undergraduate students to a highly selective (research) university" (Pedrosa 2006).

The second UNICAMP initiative, the Interdisciplinary Higher Education Program (PROFIS), relies on very different principles and methods. The program uses the geographic distribution of public high schools in the city of Campinas as a proxy for socioeconomic/race distribution of the population. At least one student, and at most two, of each school are granted admission to a special general education program at UNICAMP, after which they choose their majors. Selected students are at the top of their class, according to their ENEM scores. This very simple admission system has had a positive effect on the diversity of incoming cohorts. (Marcelo Knobel 2017).

In recent years, the Brazilian government has sought to integrate affirmative action into the national legal framework. The National Plan of Education for 2000-2010 aimed to reach a 30 percent participation rate among the college-age (18-24) population by 2010. That level is usually considered the threshold of

universalization of access in the literature (Trow 2007). That goal was not reached as of 2012, despite the growth of more than 230 percent in enrollments in the 2000-2012 period, from 2.7 million to 7.0 million enrolled students (Ministry of Education statistics). The Law of Social Quotas, enacted in 2012, requires public universities to reserve half of their admission seats for high school graduates coming from public high schools and to vastly increase the enrollment of students of African descent (Romero 2012). The current Nation Plan for Education has established the goal of enrolling 33 percent of the college-age population in higher education. This is a major strategic objective, despite the obvious difficulties the country has faced in meeting the proposed goals. However, at the current pace of growth, it is not likely that the 2020 goal will be fulfilled either. In 2015, the net enrollment rate was 18.1 percent, and regional differences remain strong. For example, while the net enrollment rate reached 33 percent in 2015 in the Federal District, in the States of Maranhão and Pará, the rates were 10.8 percent and 11.6 percent respectively.[7]

BOX 4—FRANCE

Apart from a few exceptions in support of specific student groups (e.g., in Macedonia or Romania), Europe does not have a strong tradition of affirmative action policy. However, one initiative is the program set up by the French political science university Sciences Po Paris, which aims to bring in talented students from marginal urban areas through a new pathway that bypasses the regular competitive entrance examination.

In response to persistent evidence that its student intake was not inclusive of student from underprivileged backgrounds, Sciences Po Paris created a new system of admissions whereby approximately 10 percent of the institution's places are set aside for students attending high schools in economically disadvantaged neighborhoods ("zones d'éducation prioritaire," or ZEP).

The new pathway identifies students as early as age 16 and gives them special support and academic preparation. Those students are admitted to Sciences Po largely on the basis of an oral interview, which probes for traits such as curiosity, academic potential and talents demonstrated outside of formal exams.

This pathway is nearly as competitive as the regular examination procedure: in 2016, 163 students were admitted via that route out of 956 applications, an acceptance rate of 17 percent (the regular route, in contrast, has an acceptance rate of 14 percent). An evaluation of the program in 2012 found that graduation rates of those students were similar to that of the other students and that graduates had slightly better track records of finding post-graduation employment (Tiberi 2011; Based on EC/EAC 2017).

In setting up affirmative action programs, governments and higher education institutions should heed lessons from the history of positive discrimination, which have often been fraught with controversy and challenges. In-depth research into affirmative action across nations and cultures reveals interesting lessons about the unintended consequences of affirmative action, such as:

The reaction of both the preferred and the non-preferred groups are neither controllable nor predicable. Non-preferred group members can redesignate themselves as members of the preferred group, creating artificial categories and distorting the purpose of reestablishing equal opportunities among groups and even worsening the situation of the intended beneficiaries.

7 www.observatoriodopne.org.br/

The beneficiaries are not always those initially targeted: preferences can benefit more fortunate members of less fortunate groups, the lowest economic group being left behind.

The benefits of such programs to the concerned groups or to the society as a whole has often been over-estimated: transfer of benefits from one group to another can change people's mindsets and result in important social, economic and efficiency losses if both groups tend to do less than their best or if the non-preferred groups decide to leave the country.

Inter-group resentments can appear even when only minor transfers of benefits apply. Group preferences and quotas go against the principle of equality of treatment and can be interpreted as unfair and unjustified privileges even though individuals of the non-preferred groups have not lost anything.

The concrete results of such policies on the reduction of inequalities are hard to evaluate, since pre-existing trends and other social, individual and economic factors are simultaneously at play (Sowell 2004).

In recent years, policy-makers and university leaders in South Africa and Israel have argued that class-based affirmative action could be a better alternative to race-based positive discrimination. However, the initial results of a pilot program launched in Israel in the mid-2000s by four of the country's most selective universities seeking to give better opportunities to disadvantaged applicants through a race-neutral and needs-blind admission system seem to indicate that the most effective approach would be to combine both ethnic and social class considerations (Alon 2016).

Outreach and Academic (Guidance) Counseling

Programs that link higher education institutions to the lower levels of education through outreach and academic counseling activities can be effective in improving transition rates and raising the probability of success in higher education, especially for at-risk students. Outreach and counseling interventions seek to reduce the academic, aspirational, informational, and personal barriers that restrict access among students currently underrepresented in higher education.

According to the *Trends 2015* report, 95 percent institutions in Europe offer open days and participate in educational fairs and 90 percent offer academic orientation and advice.[8] Outreach to upper secondary schools, which has been common in the United States for many years, is a growing practice in Europe: 82 percent of *Trends 2015* respondents indicated they now have such programs.

Even though outreach to schools is usually left up to each higher education institution to organize, some countries require it as a matter of national policy. In France, for instance, in an effort to combat the high failure rate at university—where only 40 percent of incoming students manage to graduate in four years (the theoretical duration is three years)—academic counselling in preparation for higher education is now an integral part of the three years of upper secondary schooling.

Elite higher education institutions are also active in this area. Trinity College Dublin (TCD) in Ireland developed an outreach model that has been so effective that it was adopted by Oxford University.[9] TCD works with a set of 19 primary and 20 secondary-level schools in Dublin to get students involved in learning, increase their interest in going to university and improve their results. The University helps to create a college-going culture within the schools by working with teachers (introducing them to new ways of teaching) and families (explaining the importance of going to university).[10]

8 A study of job fairs in France shows that they tend to bolster social reproduction in attracting specific student categories (upper/middle/lower social classes) depending on the prestige of the group of institutions that are assembled (van Zanten and Legavre 2014).

9 All institutions in Ireland are involved in awareness week: Cf. https://www.collegeaware.ie

10 https://www.tcd.ie/Trinity_Access/activities/

Providing good information about higher education is crucial to students from underserved groups because they cannot rely on their family network. While the provision of information is not always targeted exclusively at underrepresented groups, this has been identified as a very important aspect of equity (Savitz-Romer et al. 2009). At the national level, a number of countries provide comparative data on student success and career development as well as platforms for the exchange of good practices (e.g. the Higher Education Academy in the United Kingdom). Some countries have set up databases and information systems to optimize student choice (e.g., Denmark, Estonia, Finland, Ireland, Key Information System in England, etc.). In most European countries, this information is public (Eurydice 2015b). The Higher Education Funding Council for England published a useful set of guidelines for the information that all higher education providers should make available to prospective students (HEFCE 2017).

Access to information, however, is not sufficient; students need help to navigate this information. School guidance in Europe, however, appears to be focused on career counseling, forcing students to seek the help of family and friends. Again, this makes transition to higher education more challenging to students from underserved groups: "More in need of high-quality advice, they have a much harder time obtaining it. Guidance therefore needs to be thought of as an issue of equity" (EC/EAC 2017a, 62).

Where admissions systems are centralized, the web portal usually provides information to assist students in making the right choices and, in some cases, offers self-tests to determine their interests and levels of competency for specific study programs.

Managing and addressing student's expectations is an important factor in student success. However, only 63 percent of *Trends 2015* respondents administer surveys upon entry to collect information on the background and expectations of newly enrolled students.

In conclusion, a solid and comprehensive system of academic and career counseling represents an essential instrument to improve the transition from high school to higher education and to increase the probability of degree completion, especially for students from under-privileged backgrounds who often lack the information–or even the motivation–to pursue their studies. While European countries have made substantial progress in developing their career information and guidance systems, few developing countries have advanced in that direction.

To operate in an effective manner, the career information and guidance system must be implemented as a coherent system bringing all necessary stakeholders together, including the Ministry of Education, Ministry of Labor, Ministry of Economy, higher education institutions, and Chambers of Commerce. It must rely on sound measurement tools for assessing quality throughout the system, particularly the quality of the information offered to students and graduates. The system should facilitate information access, allow for self-help and self-development, lead to increased use of information and communication technologies, and promote interaction among higher education institutions, employers in the private sector and NGOs (Watts and Fretwell 2004).

With respect to outreach practices around the world, a review conducted in 2009 revealed a number of useful lessons of experience (Savitz-Romer et al. 2009).[11]

- Establish early intervention programs and policies. Ensuring that students possess adequate skills and aspirations to successfully seek out and enroll in higher education must start early. Children's career and educational aspirations are formed in early years of schooling, and negative experiences and messages about their chances for entry into higher education likely diminish their motivation and interest.
- Build collaborative partnerships. The most successful outreach and bridge programs involve university-school partnerships that allow for multi-level interventions and support. The presence of a university partner in a primary or secondary school community helps to influence the aspirations of

11 A Universities UK report (2017a) presents a set of case studies highlighting best practices in outreach to schools and drawing lessons from experience.

students, expectations of teachers, and enhances possibilities for creating a broader community of learners, holding great promise for improving secondary school completion rates and access to higher education.

- Increase policy attention to engaging families in interventions. It is widely recognized that parents and extended family members play a key role in influencing higher education aspirations. Family support, both financial and emotional, is critical in shaping students' aspirations, as well as their academic preparation for higher education. The impact of family and community on education aspiration-setting is an area that warrants additional attention, especially among communities with few or no first-generation college-attenders.
- Create linked programs. The importance of linking interventions to funding is evident in multi-tiered programs where scholarships act as incentives and rewards for successful participation. In this way, students are more likely to overcome the multiple barriers they face when pursuing higher education, rather than creating dichotomies among their academic, social and financial needs. A program in the Colombian province of Antioquia offers useful lessons in this respect (Box 5).

BOX 5—CONDITIONAL SUBSIDIES TO INCREASE THE TRANSITION BETWEEN SECONDARY AND TERTIARY EDUCATION IN COLOMBIA

The conditional transfer incentives program was designed and implemented in the context of a secondary education project in the Colombian department of Antioquia, with technical and financial support from the World Bank, between 2009 and 2014. The main purpose of the scheme was to reduce dropout rates and increase the transition from upper-secondary to tertiary education.

Five thousand students were randomly selected according to the following criteria: (i) formal enrollment in a public high school, (ii) coming from a bottom income quintile family, (iii) being below 18 years, and (iii) not coming from a family that was already in a conditional cash program (Familias en acción). These students received the equivalent of 21 dollars every month, ten months a year. Continuous participation in the scheme was conditional upon the student staying in school and participating in the "Education for Peace" activities of the federal government.

A preliminary evaluation of the program's impact on retention and learning outcomes, conducted after three years of operation, found that dropout rates had fallen by 40 percent, and that participants obtained significantly higher scores in language. The authors of the evaluation observed an increase in the transition rate from secondary to tertiary from 23 percent in 2006 to 30 percent in 2013.

Source: Econometria (2013). Evaluación del Programa de Incentivos en la Educación Media. Bogota: Econometria.

RETENTION PROGRAMS TO INCREASE STUDENT PERSISTENCE AND SUCCESS

Equity promotion policies often emphasize increased access as the main measure of progress. However, student success and degree completion are also critical to achieving equity, and require effective support programs and regular measurement of outcomes such as graduation rates for under-represented groups. Policymakers and higher education institutions have developed dedicated support mechanisms—financial, academic, personal or structural—in order to increase completion rates. They include adequate financial aid (see Section 3.3), together with appropriate support services, such as first-year induction, early detection of academic difficulties, academic advising, tutoring and mentoring, and psychological counseling for personal support.

While U.S. institutions were trailblazers in this area, this section presents examples from other parts of the world. For example, some institutions in developing countries have a "first-year provost" responsible for closely monitoring the academic results of new students—especially first-generation students—and providing targeted support to those in difficulty (Box 6). While it is well documented that the first academic year is critical to student success. in Europe, "only about half of the EHEA countries have developed policies and practice focusing on the retention of first-year students"; of those, only half apply the full set of measures: introductory or insertion courses, tutoring and mentoring, and specific courses and supports to acquire learning and organizational skills (Eurydice 2015b).

BOX 6—COLOMBIA'S UNIMINUTO: AN INCLUSIVE UNIVERSITY

Uniminuto, described earlier in Section 3.4, was founded in 1990 with the explicit purpose of offering good-quality education to young people from low-income families living in disadvantaged areas of Colombia.

About 45,000 of the university's 100,000 students study online. Two-thirds of the students are female; 54 percent belong to the lowest two income quintiles. Approximately 80 percent of the students receive some form of financial support.

Uniminuto has put in place a special program of academic support for at-risk students. Initially, the program targeted first-year students because of their higher tendency to drop out. The First-Semester Initiative, launched in 2006 later became the First-Year initiative, with a "first-year vice-dean" assigned to oversee the program.

In2012, the first-year academic program evolved into a more comprehensive approach, the Modelo de Atención Integral al Estudiante, or Integrated Focus Model (IFM), during the entire course of studies, offering a wider range of interventions to accompany students in difficulty and follow them throughout their studies. IFM involves a sequence of support activities, careful measurement, early warning systems, and impact evaluation. At-risk students have access to five categories of support services: (i) academic counseling, (ii) financial support for temporary difficulties, (iii) psychological counseling, (iv) a life project course, and (v) remedial courses.

In 2012, Uniminuto was the first educational institution to win the G-20's Challenge on Inclusive Business Innovation for its "innovative social model for social inclusion". In 2013, the *Financial Times* and the International Financial Corporation gave Uniminuto their first Inclusive Business Award.

In **South Africa**, the 2001 National Plan for Higher Education marked a shift in focus from access to success, with emphasis on improving graduate outputs. The policy set benchmarks or graduation rates, and targets (supported by planning and funding incentives) to increase enrollment in science, engineering and technology. Extended curriculum programs create enabled talented but underprepared students to succeed in undergraduate studies; the majority of students enrolled in these programs would not have qualified for direct admission. Under these programs, the undergraduate degree is usually extended by one year, and that time is used to for foundational education. In particular, introductory courses enable students to develop academic skills like, information literacy and numeracy. The programs are supported through earmarked grants from the state.

In **Brazil**, one of the most important challenges in higher education today is to raise the number of graduates. The number of students who complete courses in public higher education institutions is quite different from private institutions. In the private sector, the number of entrants and graduates increased at about the same rate until 2011, when the gap began to widen. This process started in 2008 in the public sector, when the gap

also started to widen in part because the number of entrants had increased while the number of graduates had stabilized. From 2000 to 2004, the opposite process occurred, with an increase in the number of graduates compared to entrants each year.

The national attrition rate in Brazil is 25.4 percent; in public higher education, the rate is 18 percent, while in private higher education, it reaches almost 28 percent. Dropout tends to be higher in distance education courses (EAD): 32.5 percent in EAD courses offered by private institutions, and 26.8 percent in EADs from public institutions. Among students over 24, dropout is higher—32.6 percent, compared to 23.6 percent for those up to 24 years old (Rama 2017). Although the dropout rate in private higher education has been increasing since 2010, it tends to be lower among FIES beneficiary students. In 2014, while the dropout rate of students receiving student financing was 7.4 percent, the rate for other students reached almost 26 percent.

Public and private institutions are responding to the pressures they are facing, especially from students. Public universities have expanded support for student success through study and work grants, as well as help with housing, food, transportation and other expenses. Several studies (Heringer & Honorato 2014) highlight the importance of these measures to the success of students admitted through affirmative action policies in Brazilian public institutions. But the authors warn that, though fundamental, financial support is not enough to guarantee the retention of these students. Accordingly, many institutions are adapting their own pedagogical programs, such as remedial courses, elementary classes in Portuguese and basic mathematics, a general education course with an interdisciplinary focus, or engagement in research projects. In private institutions, in addition to the ProUni grants and the FIES loans, there are study grants, partial or full grants, self-financing programs and discounts on tuition fees. In addition to financial support, some institutions have offered pedagogical support psychological and educational orientation or "reinforcement" classes.

The Residential Campus Experience and Student Engagement

A residential campus experience that promotes student learning in and outside the classroom, widely seen as a factor of student success, traces its roots to English education—and has become a strong component of Irish and North American education—but is not common in most parts of the world.

On the European continent, this is probably a consequence of the fact that the oldest universities (and therefore the most prestigious and leading institutions) are located in cities with high real estate costs This model is also common for newer universities, such as the Université Paris-Est Créteil, built simultaneously with a new suburban development in the 1960s, so that the town residents and campus are integrated. Where there are residential campuses, housing capacity is often limited and reserved for students from distant parts of the country or from abroad. Residential staffing may be confined to maintenance and safety, and exclude activities promoting student engagement and co-curricular learning. The distinction between the academic and non-academic environment is amplified when student housing is administered by external agencies, rather than institutions.

Despite evidence that the residential campus experience contributes to student engagement and retention, much of higher education is moving away from that model for several reasons. Student tend to select urban over rural campuses, which usually organize residential life differently. The use of technology has changed the way students interact with their institution.[12] And rapid massification in many parts of the world has produced large to very large institutions, which militates against the residential campus approach.

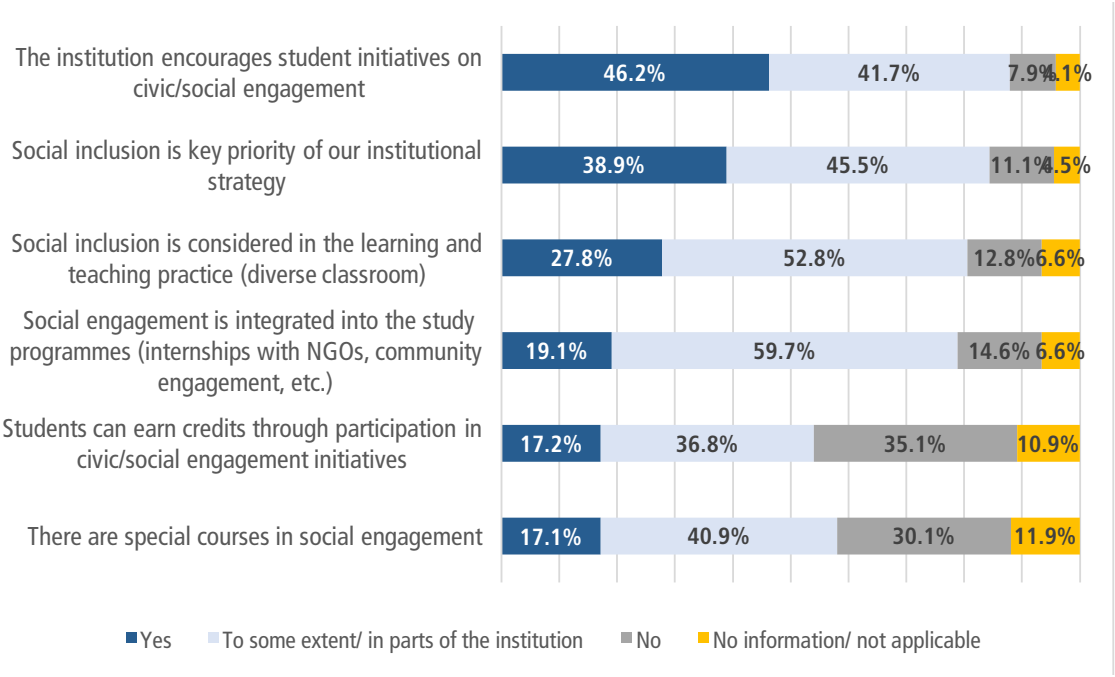
In lieu of residential campuses, many institutions in Europe support student-led activities and promote student engagement primarily through their participation in institutional governance. Student involvement in

12 For an example of building a virtual learning community, albeit not targeted at underserved populations, cf. Davidson and Goldberg, 2010, Chapter 5. See also: http://www.educationdive.com/news/dorm-amenities-may-dissuade-potential-student-applicants/503633/. Anecdotal evidence points to the fact that students are not always open to the universities' use of "their" social network and electronic communication (cf. Stoner 2017).

governance is prevalent almost everywhere in Europe, albeit more at the faculty[13] (college) rather than central level. The wave of governance reforms in Europe during the first decade of the 21th Century resulted in smaller deliberative bodies, which also reduced student representation. Students are, on the other hand, increasingly involved in external and internal quality assurance processes (Sursock and Smidt 2010).

Higher education institutions in Europe are less likely to support other forms of student engagement, such as voluntary work and community service. Data from the *Trends 2018* report show that 46.2 percent of respondents "encourage student initiatives on civic/social engagement," and 41.7 percent do so "to some extent / in parts of the institution" (cf. Figure 5).

Figure 5: Impact of inclusiveness and social engagement on learning and teaching



Source: EUA, Trends 2018

BOX 7—ROSKILDE UNIVERSITY, DENMARK

Established in 1972, Roskilde University (RUC) provides Problem-oriented Project Learning (PPL). The students live off campus but work in large groups (of about 110) and are assigned to a "house" on campus. Each house includes seminar rooms, space for group work and social activities, offices for administrative and academic staff, computers and copying facilities. Students are given a key and collectively bear responsibility for the facilities. Each cohort of 110 students designs a group project, and agrees on a problem to investigate during the semester in groups of three to eight students. The same cohort of 110 students work on a new project each semester. Students generate project ideas through discussions with academic staff or external partners, or through the RUC Innovation Office. The notion of "house" at RUC is different from that of a residential university, but has minimized dropout rates in comparison with traditional universities. It should be noted, however, that PPL's use of physical space cannot be distinguished from the pedagogical aspects of the approach.

Source: HEA 2016.

13 The term faculty in this report refers to an administrative unit (e.g. faculty of medicine).

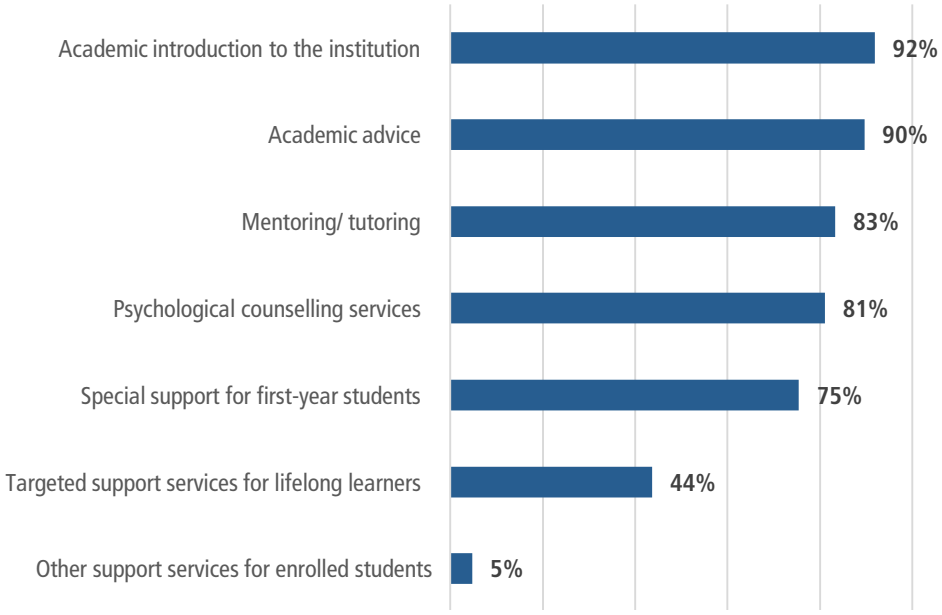
Student Support Services and Counseling

Once students are enrolled, the bulk of institutions offer a range of support services, though the interpretation of what constitutes student services differs widely. In Europe, some institutions include services that support the academic work of students directly, such as advising and tutoring, while others include medical care, psychological counseling and social services. As with on-campus housing, some countries organize academic and pastoral services nationally, most notably medical care and social services, meaning the student goes outside the campus for those services.

International experience shows that it is indispensable to include psychological support services in prevention programming (Rowan-Kenyon 2010). Students often face personal concerns and stresses that can be a barrier to degree completion. For this reason, institutions should explore services for students in the form of counseling, mentoring, and advising.

Remarkably, all Irish institutions offer all of the services listed in Figure 6, consistent with the emphasis on broadening access in that country. Eurydice's access report singles out Ireland for its performance in this area (Eurydice 2015a) while *Trends 2015* notes that dropout rates declined in "Austria, Denmark, Finland, Germany, Hungary, Ireland, Netherlands, Spain and the United Kingdom. In all cases, their student support services appear to be strong and they seem to be providing a strong safety net." (Sursock 2015)

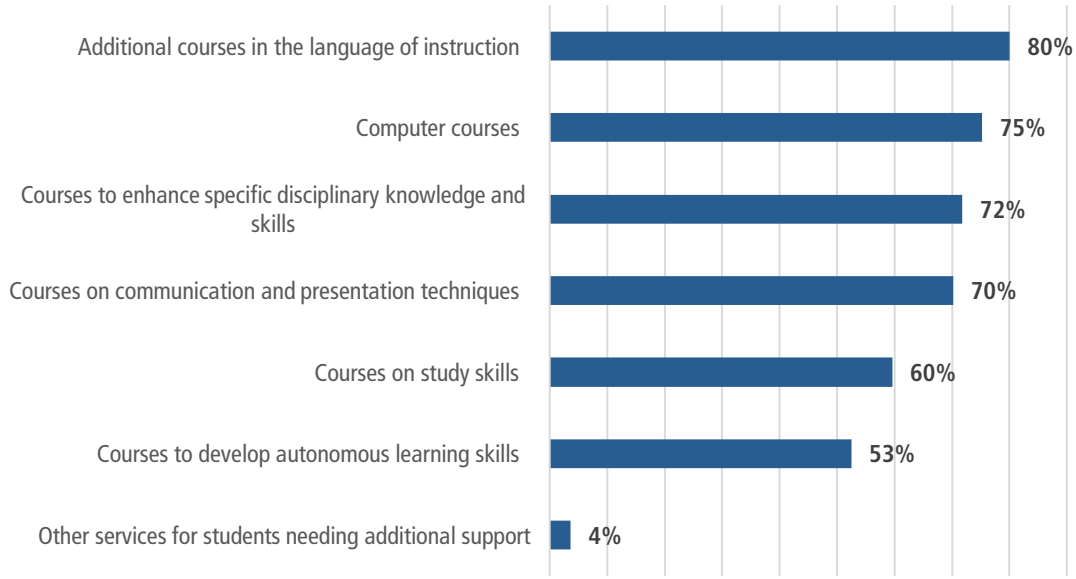
Figure 6. Support services to enrolled students in Europe



Source: Trends 2015

Students with special needs receive additional support as illustrated in Figure 7. Again, the Irish institutions offer the strongest support to their students, followed by those located in Germany and the United Kingdom. These initiatives are most likely linked to the expansion of higher education and widening participation, but this hypothesis was not tested in the *Trends* study.

Figure 7: Services for Students who require Additional Support (Europe)



Source: Trends 2015

BOX 8—CORK INSTITUTE OF TECHNOLOGY (CIT): STUDENT ENGAGEMENT OFFICE

CIT launched the Strategic Student Engagement and Retention Initiative in September 2012, which has evolved into an integrated and well-resourced Student Engagement Office (AnSEO). AnSEO collaborates with all 28 academic departments and with central services, as appropriate, to enhance student engagement. Thanks to this initiative, the non-progression rate has been reduced from 22 to 17 percent.

Some of the major AnSEO projects are as follows:

Good Start Student Induction Program: During the first semester, a first six-weeks themed program of activities and communications for incoming first-year students makes transition to CIT easier and welcoming. In the second semester, students returning after the winter break have a week of information campaigns and activities to eases their return and coinciding with first semester examination results. A student team of Good Start Ambassadors are hired to work on the roll out of Good Start induction program across all four campuses.[1]

Just Ask! Information Campaigns. Pop-up colorful and interactive help desks staffed by trained student ambassadors, seminars, workshops and complementary social media campaigns on a variety of topics.

Get Connected! Ice-Breaker Events. Trained Good Start and PALS (cf. below) leaders work with academic departments in the first weeks of the first semester to run social /icebreaking events with first-year class groups and their teaching teams, to Improves communication and relationships, and increase belonging and engagement.

Transitions to CIT Projects. Academic departments are invited to apply for small amounts of seed funding for activities to enhance student engagement and communications.

PALS: Peer-Assisted Learning and Support. Upper class students are trained to lead study sessions and / or provide social support/= and mentoring to newer students and there is a strong communications web from the Student Engagement Office to PALS leaders to mentees.[14]

Academic Success Coaching. Academic success coaches work directly with class coordinators and designated student groups to identify and support students who may be unsure or struggling with course selection or academic challenges.[15]

Academic Learning Centre (ALC). The ALC provides free academic support to students in challenging subject areas. ALC also runs information campaigns and awareness-raising activities encourage students to seek assistance if they are struggling academically.[16]

SPARQ At CIT. Student Partnership in Quality @CIT is CTI's National Student Engagement Program focused on enhancing student/staff interaction and communication. SParQ @CIT connects directly with CIT Students' Union and over 250 Class Reps CIT wide annually.

1 http://studentengagement.cit.ie/goodstart

Source: http://studentengagement.cit.ie

The impact of support services in Europe is not systematically monitored, and it is rare that underserved students are the target of such monitoring or that specific efforts are expanded to identify at-risk students or to analyse patterns of success and failures. As discussed in Chapter 4, the internal quality assurance function and institutional research are relatively new developments in Europe and, with the exception of a few countries such as Ireland and the United Kingdom, most have not yet developed that capacity.

Innovative and Flexible Educational Offer

One of the major principles of Europe's Bologna Process has been to provide greater flexibility and more personalized learning pathways. Today, most European countries recognize the need for flexible program delivery to address the needs of students who work by offering part-time enrollment, evening and week-end classes, and online and hybrid learning.[17]

Some countries have gone further to accommodate alternate periods of work and study:

> Italy and Georgia enable students to interrupt their studies without losing their student status, thus making the continuation of studies after breaks easier. In Sweden, such practice is widespread, with employees allowed a leave of absence to study while being guaranteed the same or equivalent employment when they return. (Eurydice 2015b)

14 http://studentengagement.cit.ie/pals

15 https://www.facebook.com/myCIT

16 http://studentengagement.cit.ie/alc

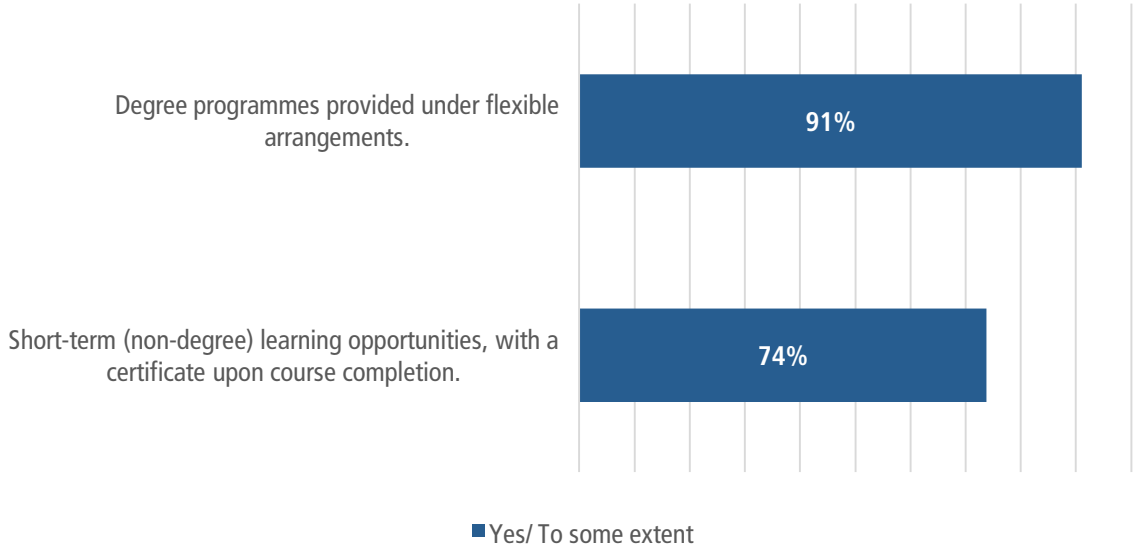
17 Cf. The Higher Education Academy's community of practice for flexible learning: https://www.heacademy.ac.uk/about/news/hea-flexible-learning-community-practice-launch

A number of countries have restructured their academic offer by proposing a wider range of study programs to address student diversity and widening participation. For instance:

> Short degree programs in Portugal and the Netherlands offer students short routes towards a profession with the option to continue to a Bachelor degree. Other countries or institutions offer students an introductory orientation phase or a less specialized Bachelor program with a broader range of subjects, as in Austria, France, Norway and some German universities. This allows students to make their final choice of specialisation later and more carefully, thus preventing them from making a switch of programme or institution early on in their education career (EC/EAC 2015).

A variety of mechanisms facilitate transition into higher education, such as bridging programs, recognition of prior learning, and transfer between programs or institutions. The *Trends 2018* results show the importance of flexible and short-term learning provision in Europe (Figure 8).

Figure 8: Increased demand for flexible provision



Source: Trends 2018

The use of ICT opens new vistas in the flexible delivery of tertiary education. The idea of digital student data portability means that students may someday be able to accumulate in one repository all their higher education accomplishments, as is the case with the Norwegian Diploma Registry.[18] Similar systems are currently in operation in Australia, Belgium (Flanders), China, Estonia, France, India, Mexico, the Netherlands, New Zealand, Romania, the Russian Federation, South Africa, the United Kingdom and the United States. De Leeuw and Skjerven (2017) note that the use of block chain could help to secure those repositories, and that "the European Commission's plan of introducing an EU Student eCard by early 2019 will also play an important role in trailblazing digital student data portability on a large scale."

BRIDGING PROGRAMS

Bridging programs aim to ease the transition between high school and university through a combination of study skills and academic preparation. These programs are widespread in the United States and becoming more common in Europe: 59 percent of *Trends 2015* respondents offer such programs to those who left

18 https://www.vitnemalsportalen.no/english/

secondary school early or who want to switch from vocational to higher education. This finding is confirmed by Eurydice (2015b), which notes that about half of the higher education systems offer one or several types of bridging programs. Examples include:

- "programmes targeted at those who have completed an upper secondary programme, which does not allow direct access to higher education (Croatia, the Czech Republic and the former Yugoslav Republic of Macedonia) and/or targeted at those who left school prior to completion of any type of secondary education (France, Greece, Moldova, Slovenia, United Kingdom (England, Wales and Northern Ireland) and the United Kingdom (Scotland)). Those programmes are usually leading to an upper secondary qualification or equivalent, but can also give direct access to a specific higher education institution (Iceland) or higher education programme/field of study without leading to a particular qualification (United Kingdom (Scotland)). A few countries (Denmark, Finland and Malta) offer special bridging programmes for refugees and immigrants. Finally, there are bridging programmes to equip candidates with specific qualifications required for a specific study programme (e.g. engineering) (Denmark, Norway and Sweden)" (Eurydice 2015b).
- Among *Trends 2015* respondents, 40 percent had "special admission policies" most notably Ireland (86 percent), the United Kingdom (67 percent) and the Czech Republic (63 percent). Survey results also found that institutions stating that they have lifelong learning strategies are more likely to have both special admission policies (72 percent *vs.* 40 percent) and bridging courses (68 percent *vs.* 59 percent) (Sursock 2015).

RECOGNITION OF PRIOR LEARNING

Recognition of Prior Learning (RPL) is a practice in a number of European countries, albeit one that affects small numbers of learners (Box 9). Some countries allow entry via RPL to all or some higher education institutions or programs. Some countries leave it up to the higher education institutions to organize their own processes, while others provide a national framework. The *Trends 2015* results show that RPL is part of an alternative entry route provided by 46 percent of institutions and a way of gaining credits toward an academic program for 61 percent. Only 14 percent of institutions do not have a process in place to recognize prior learning while, at the other end of the spectrum, 19 percent are able to award a full degree on the basis of RPL (Sursock 2015).

BOX 9—RECOGNITION AND VALIDATION OF PRIOR LEARNING IN EUROPE

In the **Flemish Community of Belgium,** regulations allow higher education institutions to grant access to bachelor's programs on the basis of a candidate's overall knowledge and skills, which are assessed by the board of the institution. Prior non-formal and informal learning can also be taken into account for access to doctoral programs for those who do not hold a master's degree.

In **Germany**, in 2009, the **Länder (states)** established a standard procedure under which master craftsmen, technicians and those with vocational qualifications in a commercial or financial area are eligible to enter higher education if they have at least three years' experience in their professional field.

In **France**, the validation of experience-based learning **(Validation des Acquis de l'Expérience**) allows individuals to get full or partial recognition of the skills and professional qualifications acquired on the job. Any individual, regardless of age, nationality or legal status, can participate in this process after three years of salaried, non-salaried or voluntary professional activity or experience. The outcome is a diploma (including at the doctoral level) or professional certificate inscribed into the National Registry of Vocational Qualifications.

In **Spain**, each year universities reserve a certain number of places for higher education candidates who fit into specific categories, including mature students. Candidates over the age of 25 who comply with traditional entry requirements may be admitted to higher education programs on successful completion of a special university entrance examination. Candidates over the age of 40 who do not possess a qualification which permits access to higher education can have their prior professional experience accredited if it is linked to the courses they want to take. Universities define the accreditation criteria and the professional experience required for different study programs. The admissions procedure always includes a personal interview. Those aged 45 and over who do not possess a qualification which permits access to higher education, and who do not have a relevant professional experience, may be admitted to higher education on successful completion of a general test and personal interview.

In **Portugal**, students over 23 years of age with no formal qualifications, together with students who have the appropriate post-secondary qualifications, may gain admission to higher education via specific examinations that prove their ability to undertake the course in question. Individual higher education institutions set these examinations.

In **Sweden**, since 2003, all higher education institutions have been obliged to assess, on request, the prior and experiential learning of applicants who lack formal qualifications. In 2006, around 5,800 applicants asked to have their non-formal and informal learning accredited and almost 2,000 applicants were considered to meet the admission requirements for the program or course they applied for. Due to competition with other students, only around 1,000 non-traditional applicants were subsequently admitted to higher education.

Source: Eurydice Network (2011).

FLEXIBILITY FOR SWITCHING PROGRAMS OR INSTITUTIONS

Opportunities to switch study programs or transfer to a different institution constitute a third type of flexible education offering to promote completion and student success. This practice is fairly common among Nordic countries, while it is less accepted in the United Kingdom and other countries. The drawback, however, is that "flexibility can cause study delays and a higher average duration to complete a degree" (EC/EAC 2015). Some systems encourage qualified students from vocational streams to transfer to academic streams. As examples, Ireland promotes these pathways through regional clustering of different types of institutions (further education colleges, institutes of technology and universities) while "in the state of Bavaria, 42 percent of Abitur holders come from outside the academic track (Gymnasium) and many end up in higher education (usually a Fachhochschule)" (EC/EAC 2017a).

ADDRESSING THE NEEDS OF REFUGEES

As a result of growing violence in the Middle East, especially in Syria, accommodating the higher education needs of refugees has become an important challenge. In March 2016, the Institute of International Education estimated there were over "100,000 university-qualified students in refugee camps or urban environments, and at least as many displaced inside Syria."[19] A 2015 report by the United Nations High Commissioner for Refugees (UNHCR) calculated that only one percent of the world refugee population was currently enrolled in higher education.[20]

19 "Why the Refugee Crisis is so Unique", Institute of International Education (March 2016) https://www.iie.org/en/Learn/Blog/2016-March-Why-the-Refugee-Crisis-is-Unique (accessed May 2017).

20 DAFI: UNHCR Tertiary Education Scholarship Program. UNHCR (2015) http://www.unhcr.org/568bc62b9.html

Data collected by EUA shows that universities across Europe are supporting refugees (students and scholars) to the extent possible.[21] Apart from issues related to their legal status and linguistic skills, the lack of financial support and of any substantial European-wide initiative prevents many institutions from hosting refugees. Country-specific quotas and nationality restrictions also affect whether refugees can access tertiary education institutions. Turkey, for example, has foreign student quotas that restrict the number of Syrian refugees who can enroll in Turkish universities.[22]

The Lisbon Convention Committee published a report in 2016 documenting the lack of attention being paid to refugees, particularly those without documentation of their degrees.[23] This situation is changing: offices of the National Academic Recognition Information Centres (NARIC) in some countries (e.g., French Community of Belgium, Norway) have implemented procedures to deal with these issues. Jesuit Worldwide Learning's online higher education program, for example, allows refugees in Kenyan camps to continue their higher education by using mobile learning.[24] German universities have also utilized online educational resources to benefit refugees. For example, the German distance university, Fern Universität, allows qualified refugees to access all online courses and provides language training, while Kiron University partnered with MOOC providers in the United States to organize a two-year online course for refugees with the possibility of then completing their studies at a host university in Germany.[25] Box 10 shows how Leuphana University in Lüneburg implemented the German-wide program "Ready for Study".

BOX 10—"READY FOR STUDY" AT LEUPHANA UNIVERSITY OF LÜNEBURG, GERMANY

"Ready for Study" is a free, 12-week course that first ran January to April 2016 designed especially for refugees and asylum-seekers in Germany. Ready for Study aims to provide an extensive set of practical knowledge and competencies, along with German language training, to facilitate integration of young refugees into the higher education system. The course helps refugees navigate the system of higher and professional education in Germany, develop skills for academic work, and commence or continue a program of study. Over the course of five consecutive assignments, participants solve case studies built around real-life scenarios to determine each individual's readiness for entering a degree program in German education institutions.

Source: http://www.leuphana.de/en/digital-school/projects-and-courses/ready-for-study.html

The EUA's Refugees Welcome Map highlights nearly 250 initiatives across European higher education institutions and other organizations that support refugees' access to higher education.[26] Box 11 presents the outline of a relevant, successful project supporting refugees.

21 http://refugeeswelcomemap.eua.be/Editor/Visualizer/Index/48

22 The Syrian Refugee Crisis and Higher Education: A View from Turkey" Institute of International Education (July 2014) https://www.iie.org/en/Learn/Blog/2014-July-The-Syrian-Refugee-Crisis-And-Higher-Education-A-View-From-Turkey (accessed May 2017)

23 http://www.enic-naric.net/fileusers/Monitoring_the_Implementation_of_the_Lisbon_Recognition_Convention_2016.pdf

24 Nakweya "Mobile Learning – Empowering Refugees 'Where They Are'

25 Lisa Unangst "Germany's Innovative Strategies to Enroll Refugees" Inside Higher Ed (18 January 2017) https://www.insidehighered.com/blogs/world-view/germanys-innovative-strategies-enroll-refugees (accessed May 2017)

26 "Refugees Welcome Map" European University Association (January 2017) http://www.eua.be/activities-services/eua-campaigns/refugees-welcome-map (Accessed June 2017)

BOX 11—INHERE PROJECT: HIGHER EDUCATION SUPPORTING REFUGEES IN EUROPE

The Mediterranean Universities Union (UNIMED), a network of 98 universities in 24 countries—along with Università di Roma La Sapienza, Campus France, the European University Association (EUA) and UNHCR—have formed a consortium to deliver a range of objectives in response to the current refugee challenge faced in Europe. Specifically, the inHERE project objectives include:

- **Collecting** and analyzing good practice examples of higher education approaches in a wide range of urgent situations for refugees and displaced students to identify successful patterns of integration with the potential to be scaled up;
- **Sensitizing** higher education governance, facilitating communication and institutional support within and outside the university;
- **Providing relevant orientation** and training to university staff, so that they are able to take an active stand and further replicate successful approaches and practices;
- **Mainstreaming** results, achievements and recommendations to higher education institutions, networks and policymakers on strategies to integrate.

Source: https://www.inhereproject.eu/project/about

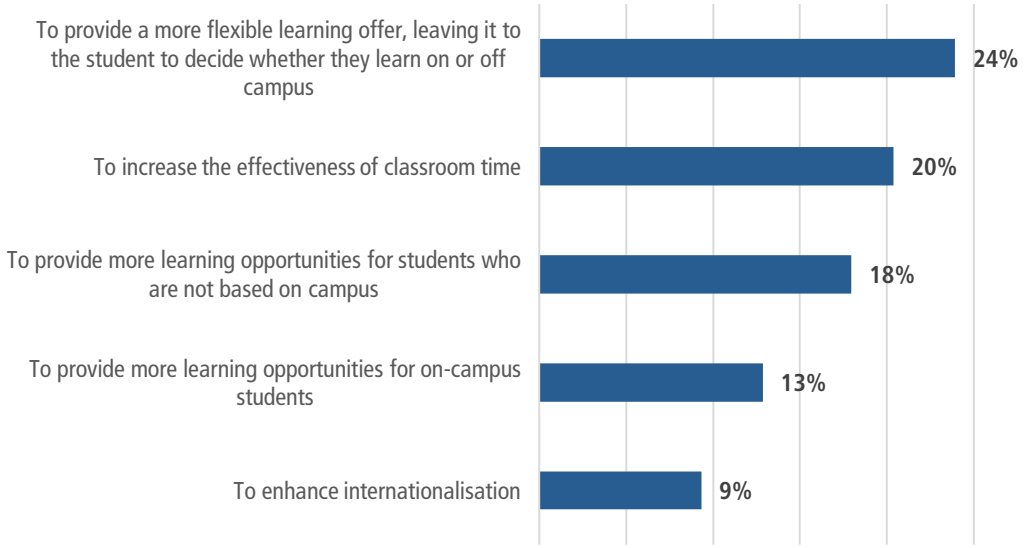
Language acquisition is another area where refugees can receive support in order to further facilitate both their integration into the host community, as well as their access to higher education. The University of Oslo offers refugees access to an online introductory Norwegian language course through a Massive Open Online Course (MOOC) launched in January 2017, and to the European Commission's Online Language Support (OSL) to learn English or enhance English language proficiency.[27]

LEARNING INNOVATION

The topic of learning innovation has made inroads in Europe as institutions develop e-learning and implement student-centered approaches, including active learning. Among institutions responding to the *Trends 2015* survey, 57 percent responded that introducing new ways of teaching was important. Furthermore, when asked about their single-most important objective in developing e-learning (Figure 9), "their top four answers indicate clearly the expectation that e-learning will offer greater flexibility and learning opportunities to students and will improve classroom effectiveness" (Sursock 2015).

27 "Refugees Welcome? Recognition of qualifications held by refugees and their access to higher education in Europe – country analyses" European Students' Union.

Figure 9: Top Five Objectives Regarding the Future Development of e-Learning



Source: Trends 2015

E-learning strategies are spreading but not yet a reality for many institutions, as shown by answers to the e-learning questions of the *Trends 2015* questionnaire. The responses suggest the development of e-learning and blended learning is considered to be the responsibility of faculties (colleges or departments), or even of individual teachers, rather than part of an overall institutional strategy. While 62 percent of respondents stated that ICT was an important current priority, when asked about its importance in the future, this number went up to 78 percent (Sursock 2015).

Data from *Trends 2018* show progression of digital learning as a strategic goal but, with the exception of a few countries, not yet operational. Institutions tend to see digital learning as a useful contribution to innovative learning and teaching, rather than a learning tool for degree or non-degree purposes (EUA 2018).

NEW OPPORTUNITIES: FROM QUALITY ASSURANCE TO BIG DATA AND SOCIAL INNOVATION

Policymakers and higher education leaders keen on promoting equity must be aware of new developments that might affect the outcomes of their efforts. Starting with an examination of the role of quality assurance systems, this section looks at the impact of big data, opportunities created by social innovation initiatives, and the tension between equity and excellence.

QUALITY ASSURANCE

Quality assurance (QA) processes have quickly spread around the world since the 1980s, spearheading a "quiet revolution" in higher education (Salmi 2015). While the early stress on quality assurance (at least in Europe) focused on the creation of quality assurance agencies, today there is increased recognition of the importance of internal quality assurance processes (Sursock 2011). This section examines to what extent these mechanisms may be useful for monitoring widening participation in Europe and elsewhere.

Starting in the 1990s, collection of national data has increased in response to the expansion and related public cost of the higher education sector (Yorke 1999, Mathies and Ferland 2013). Today, most systems in Europe

track the total number of degrees conferred, student progression, retention and completion and there is less variation than was the case earlier as to the types of data being collected (Gaebel, Hauschildt, Mühleck & Smidt 2012).

As mentioned, however, systematic external monitoring of widening participation is not yet common practice in Europe, with some exceptions. In Ireland, the Higher Education Authority (HEA) analyzes yearly student data, and institutions are required to submit annual reports on their students. Any discrepancy between the institutional and HEA data, or lack of progress in reaching targets set by the institutions, is discussed during the annual "institutional dialogues" that the HEA holds with each institution. Furthermore, where such monitoring occurs, only a few education systems "make a systematic use of the information collected on the basis of graduate surveys… (e.g. in Estonia, Spain, France, Italy, Poland, Slovakia, the United Kingdom, Iceland and Norway)" (Eurydice 2015a).

The UK has introduced a unique monitoring tool, the Teaching Excellence Framework (TEF), which compares universities on six quantitative metrics: retention rates; student satisfaction data on measures related to teaching, assessment, and academic support; and rates of employment or postgraduate study six months after graduation. These metrics take into account the demographic profile of each institution's students and its mix of programs. In other words, the TEF is meant to measure the relative value added by the institution. TEF has been controversial because it seeks to capture in one rating (gold, silver, bronze) whole universities, rather than individual courses and, therefore, suffers from the same defect as more traditional ranking instruments.

In several Latin American countries (Brazil, Colombia and Mexico), the ministries responsible for higher education analyze measures of added value at public and private institutions by comparing the learning outcomes of incoming students to those of the would-be graduates four years later.

Quality assurance agencies are increasingly considering student success, notably by looking at completion, retention and dropout rates. Examples include Croatia, Flanders, France, Hungary, Ireland, Italy and Montenegro. Furthermore, it is accepted practice that agencies post accreditation and evaluation reports on their websites (EC/EAC 2015).

Turning to internal quality control mechanisms, a 2017 report reveals that higher education institutions around the world monitor student success. This is particularly the case for institutions from the Asia Pacific region (89 percent), followed by the North American region, Europe and Africa (Martin 2017).

Furthermore, a growing number of higher education institutions survey their current students, recent graduates and alumni (Martin 2017). Surveys are used to identify student-related issues, measure students' skills acquisition, improve academic advice and counseling and develop additional support services. While these instruments are not directly targeted at underserved students, they constitute the first steps in developing both institutional research capacity and the skills necessary to collect and analyze larger sets of data available through technology-based learning and teaching.

LEARNING ANALYTICS

The use of "big data" and predictive analytics have arisen in just a few years as powerful tools to assist policymakers and practitioners in making evidence-based decisions through mathematical modeling, digital simulation and scientific computation. Higher education institutions can use data analytics to identify and support at-risk students as part of their institutional retention policy. While a primary objective of this report is to identify promising policies and practices from outside the United States, the use of learning analytics is an emerging area in which U.S. higher education has taken a leading role and, therefore, figures prominently in this section.

One survey estimated that about 40 percent of U.S. universities have experimented with novel data analysis methods to follow the digital footprint of their students and detect, very early on, behavioral changes associated with potential academic difficulties (Ekowo and Palmer, 2016). Administrators and professors can use digital dashboards and "heat maps" that highlight who might be in academic trouble, and intervene with targeted forms of support.

The University Innovation Alliance (UIA) is a consortium of 11 large public universities in the United States, formed in September 2014 with support from the Ford Foundation, Bill and Melinda Gates Foundation, Lumina Foundation, and other major donors, with the goal of improving outcomes for underserved students. Using predictive analytics, "intensive advising," and other methods, Alliance universities pilot innovative practices that can be scaled up for the benefit of large numbers of U.S. students (http://www.theuia.org/).

For example, Georgia State University (GSU), a member of the University Innovation Alliance, enrolls sixty percent nonwhite and many first generation students and is using predictive analytics for academic advising. GSU relies on an early-warning system built on the analysis of 2.5 million course grades over 10 years to identify critical factors that reduce the chances of graduation. For example, an academic adviser will get a red flag if a student does not receive a satisfactory grade in a course needed in her or his major, or does not take a required course within the recommended time, or signs up for a class not relevant to his or her major. As part of establishing the Graduation and Progression Success program, GSU added academic advisers and managed to bring down the caseload rate from 700:1 to 300:1. The University has obtained impressive results: graduation rates are up six percentage points since 2013; to get their degree, graduates spend, on average, a semester less than before, saving an estimated $12 million in tuition; and low-income, first-generation and minority students have closed the graduation rate gap, even in tough STEM majors.

Another UIA member recognized for its use of data analytics on a large scale is Arizona State University (ASU), which enrolls 72,000 students. ASU's eAdvisor system, which flags students at risk of lagging behind, is credited with a significant increase in completion rates for students from vulnerable groups, from 26 to 41 percent, since its establishment in 2007.

Many other U.S. institutions are also experimenting with learning analytics. Ball State University in Indiana monitors not only the academic engagement of students but also their social activities, in order to identify unexpected shifts in patterns that may reflect difficulties. Retention specialists immediately contact the students to offer academic or psychological support as needed. Special attention is given to Pell Grant beneficiaries (low income students) through a mobile app. Rio Salado Community College has installed a similar system (Box 12).

BOX 12—CASE STUDY: RIO SALADO COMMUNITY COLLEGE

With funding from the Bill and Melinda Gates Foundation, Rio Salado College implemented an initiative that sought to promote student success, retention and completion with five integrated technological innovations designed to scale up personalized outreach and advising support delivered by only five advisors to more than 5,000 students enrolled in the initiative.

Learning analytics were employed to test the effectiveness of the initiative using a prediction-based propensity score-matching model. The model demonstrated the effectiveness of initiatives and further identified students and student groups whose demands were not met by the initiative. This allowed Rio Salado to develop targeted campaigns and outreach to meet the needs of these students at the right time and in the right way.

Source: Universities UK (2016)

The University of Maryland System has adopted the Predictive Analytics Reporting (PAR) Framework's Student Success Matrix to improve outcomes through the use of predictive analyses and benchmarking to identify students at risk. Karen Vignare, Vice Provost for UMUC's Center for Innovation in Learning and Student Success (CILSS) stated:

> "Our culture of evaluation and our use of learning analytics have created a new way of thinking about learning. Our focus is not solely relegated to individual courses or processes, but rather to all of the activities that contribute to educational improvement…The process of leveraging analytics and improving student outcomes requires institutions to add capacity in understanding the data, applying evidenced based research practices for the student populations served, and a willingness to measure the effectiveness of the initiatives applied." [28]

Canadian universities have also started to use predictive analytics to identify and help students at risk (Chiose 2016). For example, the use of big data led to the University of Toronto's decision to no longer allow students with poor scores in their first term to continue taking classes with their cohort, under the condition they would re-take the courses they failed. Data on graduation rates showed that the majority of these students did not finish their degree, so moving them along did not work. Instead, the university now asks them to repeat their first year and participate in a special program, Refresh, which includes academic, professional and personal development courses. Along similar lines, the University of British Columbia has a pilot project to link the academic trajectory and preparation of incoming students with their participation in extracurricular programs, university grades, and labor market results.

SOCIAL INNOVATION AND EQUITY IN HIGHER EDUCATION

Social innovation, defined as novel and more sustainable solutions to existing social problems in ways that create value for society as a whole rather than just to private individuals, offers promising avenues for reducing disparities in higher education. For example, innovative forms of resource mobilization can improve student aid opportunities for low-income groups. In October 2015, the design firm OpenIDEO launched an online challenge to come up with novel ideas to address the financing crisis in higher education (McNeal 2016). The competition yielded many innovative projects that could well be applied to many country contexts, or that could spark other income generation initiatives for higher education. Some of the most promising crowdsourced solutions with an equity dimension are featured below:

- **Brighter Investment (Canada)**: Inspired by Kiva, the online micro-lending organization, Brighter Investment provides a platform for potential donors who want to support university education for high-potential students in developing countries who face financial barriers to getting their degree.[29] Aspiring students sign up with the platform and apply to the university of their choice. Vancouver-based Brighter Investment pools together funds from individual donors to cover the cost of tuition and living expenses. Students repay a share of their income for a set period of time after graduation.
- **One Day Experience (Spain):** The Barcelona-based company helps 15- to 24-year-olds with career counseling.[30] It connects young adults who are not yet ready to choose a career and professionals who can give them a sense of what working in their industry would be like. The platform connects the indecisive young people with professionals in their fields of interest and gives them the opportunity of shadowing these mentors on the job for a day. The company provides "vouch-

28 http://www.parframework.org/ssmx/

29 http://www.brighterinvestment.com/

30 http://onedayexperience.es/

ers" that young adults use to cash in for one day on the job with experts in industries that they are interested in knowing better.

- **Tuition Heroes (United States)**: This company monitors the annual growth rate of tuition fees and grants a "tuition hero" status to colleges and universities that keep their tuition in line with normal inflation rates. "Tuition hero" institutions receive a badge to display on their websites and in marketing materials. The concept is similar to the way the Energy Star badge gives efficient appliances brand recognition..[31]
- **PelotonU (United States)**: This U.S.-based project matches working adults who seek a college degree to online programs, and provides an office where they can study and receive additional tutoring and mentorship.[32] It guarantees that students will graduate debt-free. To achieve this, PelotonU helps the students obtain a government scholarship for low-income students (Pell Grants), employers pay for student support, and local donors provide gap funding.
- **1Gen2Fund (United States):** This is a crowd-funding platform that helps first-generation students successfully complete a four-year college degree.[33] The platform gives first-generation students who meet certain criteria a place to ask for financial help, receive e-coaching and access additional support resources. Rather than competing for individual scholarships, students ask directly for funds, while alumni and other donors sign up to provide financial support and mentorship. 1Gen2Fund is a U.S.-based nonprofit organization that operates on a percentage of donations.

Other innovative financial technology initiatives have seen the light since the 2015 OpenIDEO challenge. Bludesks.com focuses on low-income students and students in developing countries.[34] Low-income students register at bludesks.com for discounted prices in on-campus courses in a large network of high-quality higher education institutions. Students receive academic credit for their completed courses and benefit from an on-campus experience. Participating institutions receive additional income by using their capacity more efficiently and get recognition for reaching out to a more diverse student population that otherwise could not afford them. Questbridge acts as a platform that helps low-income students in the United States get access to top colleges and universities.[35] Starting from the observation that about 80 percent of the highly qualified students from disadvantaged backgrounds graduating from high school never apply to a top school because of the perceived high cost of studying at a selective university, Questbridge matches students with full four-year scholarship. The students in the program also get help with their applications and support from a network of scholars during their studies.

CONCLUSION

Studying equity promotion policies in higher education from an international perspective reveals striking differences between approaches in the United States and other countries. With some exceptions, many European countries do not have systematic policies to help identified underserved groups. Rather, they tend to implement mainstream strategies to expand access and success on the assumption (not necessarily well founded) that all groups will benefit equally. In other parts of the world, while targeted policies can be found, the full array of student support services may be lacking due to financial constraints or the fact that third parties are in charge of delivering some of the services.

31 http://tuitionheroes.com/

32 https://www.pelotonu.org/

33 http://www.1gen2fund.com/

34 http://www.bludesks.com/

35 https://www.questbridge.org

A significant complication is that student background data are not widely available, which makes it difficult to analyze equity needs and design targeted policies. The data limitations often arise from weak technical capacity at the national or institutional levels, especially in developing nations. Sometimes, ethical and privacy considerations can result in legal barriers to data collection on the personal characteristics of students, as is the case in France, where it is illegal for universities to collect or disseminate information on the socio-economic, ethnic or religious background of students. In Germany and the Nordic countries, as a result of WWII, privacy laws offer tight protection for "sensitive" personal information, including race, ethnicity, religion and other characteristics.

With this in mind, one of the principal findings of this study on equity in higher education is that the most effective ways of increasing opportunities for underserved students are holistic strategies that combine financial aid with measures to overcome non-monetary obstacles, such as lack of academic preparation, insufficient information, low motivation, and limited cultural capital. The direct implication is that, policymakers and institutional leaders must work together to address the equity environment comprehensively, instead of relying on piecemeal approaches for overcoming barriers to access and success.

With regard to the financial aspects, there is strong evidence that well-targeted and efficiently managed financial aid can be instrumental in reducing financial barriers to higher education.

As far as the non-financial factors of disparities are concerned, many nations and institutions have successfully implemented outreach and bridging programs to secondary schools, changed admission procedures and/or introduced preferential admission programs, provided flexible learning paths, and developed proactive retention programs to improve completion rates.

Many of the challenges that students bring with them to institutions of higher education result from inadequate secondary education. This is particularly true for students from rural areas and low-income students. These students are more likely to struggle in higher education and are at a higher risk of dropping out before earning a degree. Therefore, secondary and higher education systems can intervene more purposefully by engaging in coordinated bridging interventions—both academic and non-academic—to support success among students from underrepresented groups.

One of the direct implications of this study is that higher education institutions must systematically support the development of robust institutional research and data collection. In that way, they can organize the appropriate tools to track students' background characteristics and intentions upon enrollment, student engagement, course completion by discipline, and monitor the performance of their graduates in the labor market. In addition, institutions should regularly assess student learning and measure student perceptions of learning and campus climate. This information is needed in order to gain an accurate understanding of the student population and student progress, which in turn enables institutions to design and implement effective persistence and retention programs.

Faculty development is key to ensuring student success. Academics need to think about how to manage and leverage diversity in their classrooms, identify at-risk students, and support them. They need to support the diversity agenda and comprehend its many educational and social benefits. Recognizing instructors' efforts and contributions to the equity agenda should be considered part of the promotion process.

In this context, a risk identified in a growing number of countries is that the search for academic distinction, defined narrowly as seeking outstanding results in research under the influence of the international league tables and government-sponsored excellence initiatives, may push higher education institutions to neglect the social dimension in their mission, thereby exacerbating disparities (Salmi 2016). Indeed, the obsession of policymakers and university leaders with standings fuels the tension between excellence and inclusion.

Governments tend to allocate more funds to research-intensive universities than to institutions dedicated to serving underrepresented groups; in turn, research-intensive universities are prone to becoming more selective in the admission process and reward their faculty members more for their research contribution than for their

involvement in teaching and student support. A study of four Eastern European countries documents how the commitment to the excellence agenda plays out against the social dimension of higher education, even in countries with a longstanding commitment to equity (Stiburek and Vlk 2018).

- Governments also have a role to play in shaping public opinion with respect to diversity and equity. As an example, Europe is becoming increasingly aware of the importance of widening participation, completion and employability. European nations have played host to a growing refugee population, faced multiple terror attacks, and experienced the rise of populism, which is linked to differential levels of higher education and unemployment or underemployment in certain countries. The financial crisis that started in 2008 has been devastating to youth unemployment in many countries, such as Greece and Spain. A study of eight European countries shows that these issues rank very high in the mind of European citizens (Friedrich Ebert Foundation 2017). As a result of these political and economic developments, governments and higher education institutions have paid growing attention to issues of race, religion, social class and graduate employability in the context of the social dimension of the Bologna process. At the same time, the rise of nationalism and populism may be endangering some of the initiatives that higher education institutions are taking.

No country or institution has found a magic bullet to overcome the historical, cultural and psychological barriers faced by underserved groups. Nevertheless, the new understanding of the components of successful, complementary policy approaches and practices outlined in this study provides a useful blueprint for developing new and innovative responses down the road and orienting further work in the area of equality, access and success in higher education. Of particular importance will be additional research of policy and practice in the areas of retention, student support, credentialing and alternative pathways as a platform for continuous dialogue and international collaboration.

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