



Authored by: Jamil Salmi, Global Tertiary Education

Expert

November 2019





Table of Contents

Ex	ecutive Summary	6
1.	Introduction	13
	1.1 Background	13
	1.2 Objective	14
	1.3 Methodology	14
	1.4 Outline of the Study	15
2.	Measuring the Impact of Equity Promotion Policies	16
	2.1 Defining and Identifying Equity Target Groups	16
	Table 1 – New Categories of Equity Groups within the Minority Category	
	2.2 Formulating a Theory of Change for Equity Promotion	
	Figure 1 – Theory of Change for Promoting Equity in Higher Education	19
	2.2.1 System-Level Enabling Conditions	20
	2.2.2 Institutional Level Enabling Conditions	21
	2.3 Measuring the Evolution of Disparities	21
	Table 2 – Number of Countries Collecting Data on Participation for Each Equity Group	22
	Table 3 – Measures of Disparity at the Higher Education Level	25
	2.4 Measuring the Impact of Equity Interventions	26
	Figure 2 – Geographical Distribution of Equity Impact Studies	26
	Table 4 – Types of Equity Interventions	
_	Figure 3 – Distribution of Evaluation Designs	
	National Case Studies	
	3.1 The Case of Australia	
	3.1.1 Overview of the Higher Education System	29
	Figure 4 – Gross Enrolment Rate of Australia and Comparator Countries	
	Figure 5 – Attainment Rate of Australia and Comparator Countries in %	
	Table 5 – Enrolment Data by Institution Type, Status and Gender	
	3.1.2 Equity Snapshot	
	Table 6 – Participation Rate by Equity Groups by University Types (2009-2018	
	Table 8 – Attrition Rates (2006-2017)	

Table 9 – Attrition Rates by Equity Groups, Total Public and Private Universities, Domes Students (2006-2017)	
Table 10 - Retention Rates by Equity Groups, Total Public and Private Universities, Domestic Students (2006-2017)	33
Table 11 – Share of Female Graduates from STEM Programs in Tertiary Education	34
Table 12 – Gross graduation ratio from first degree programs - ISCED 6 & 7	34
Table 13 – Gender Distribution by Academic Positions	35
Table 14 – Proportion of Female Vice-Chancellors	35
Table 15 – Employment Rate of Graduates	
Table 16 – Employment Rate of Graduates by SES	
3.1.3 Government Equity Promotion Policies	36
Table 17 – Government Expenditure on Tertiary Education as % of GDP	38
3.1.4 Equity Promotion Policies at the Institutional Level	40
3.1.5 What Works: Impact of Equity Policies	42
Table 18 – Financial Instruments in Support of Equity	44
3.1.6 Summary Analysis of Equity in Australia: Strengths, Challenges and Suggest	ions
	45
3.2 The Case of Austria	47
3.2.1 Overview of the Higher Education System	47
Figure 6 – Gross Enrollment Ratio Tertiary Education Comparator Countries (%)	47
Table 19 – Number of Institutions and Enrolment by Type of Institution (2010-2018)	48
3.2.2 Equity Snapshot	48
Table 20 – Share of Students with One Parent Having Attained Higher Education, by Immigrant Status	49
Table 21 – Share of Students with One Parent Having Attained Tertiary Education, by Immigrant Status (%)	
Table 22 – Proportion of Native and Foreign-Born 15-29 NEETs (2017)	50
Table 23 – Gross Graduation Ratio from First Degree Programs (2016)	50
Table 24 – Enrolment and Graduation by Gender and Type of Institution (2008-2018) .	
Table 25 – Percentage of Female Graduates from STEM in Tertiary Education	
Table 26 – Distribution of Academic Ranks by Gender	
Table 27 – Gender Distribution for High Level Positions in Austrian Universities	
3.2.3 Government Equity Promotion Policies	
Figure 7 – Total Expenditure on Higher Education as Percentage of GDP (2016)	
Table 28 – Total Enrolment in Universities 2000-2008	
3.2.4 Equity Promotion Policies at the Institutional Level	
3.2.5 What Works: Impact of Equity Policies	59

Table 29 – Typology of European Admission Systems	59
3.2.6 Summary Analysis of Equity in Austria: Strengths, Challenges and Suggestion	าร 60
3.3 The Case of Colombia	62
3.3.1 Overview of the Higher Education System	62
Table 30 – Gross Enrollment Rate of Colombia and Comparator Countries	
Figure 8 – Gross Enrolment Rate 2010-2018	
Table 31 – Number of Higher Education Institutions in 2018	
Table 32 – Enrolment by Legal Status, Learning Modality, and Gender	
3.3.2 Equity Snapshot	63
Table 34 – Dropout Rate by Socioeconomic Strata	64
Table 35 – Geographical Distribution of HEIs and Enrollment	
Figure 9 – Enrollment Rate by Gender in Select LAC Countries (%)	
Table 36 – Share of Enrolment by Gender at National Level (2010 - 2018)	
Table 37 – Percentage of STEM Graduates who are Female	66
Figure 10 – Gross Enrollment Rate of Women and Men in Colombia (2008-2018)	67
Table 38 – Gender Distribution by Academic Positions	67
3.3.3 Government Equity Promotion Policies	67
Table 39 – Selectivity and Absorption 2010-2018	69
Table 40 – Government Expenditure on Tertiary Education as % of GDP	69
Table 41 – Evolution of Student Loan Beneficiaries (2010-2018)	70
Table 42 – Distribution of ICETEX Loans by Type of Institution	71
Table 43 – Panorama of Government Grants and Loans	72
3.3.4 Equity Promotion Policies at the Institutional Level	73
Table 44 – Comprehensiveness of Equity Promotion Policies	74
Table 45 – Financing Instruments in Place	74
Table 46 – Non-Monetary Instruments in Place	75
Table 47 – Share of Enrolment by Gender at Institutional Level (2010 - 2018)	75
3.3.5 What Works: Impact of Equity Policies	78
Table 48 – Evolution of the Disparity Index (Q5/Q1) for Colombia and Comparators	79
Figure 12 – Distribution of ICETEX Loans by Socioeconomic Groups	80
Table 49 – Distribution of Enrollment by Socioeconomic Groups (%)	81
Table 50 - Dropout Rates by Socioeconomic Groups (%)	81
3.3.6 Summary Analysis of Equity in Colombia: Strengths, Challenges and	
Suggestions	83
3.4 The Case of South Africa	85
3.4.1 Overview of the Higher Education System	85

3	3.5.6 Summary Analysis of Equity in Vietnam: Strengths, Challenges and Suggesssons from the Case Studies: Common Threads and Diverging Paths	112
3		tions
	3.5.5 What Works: Impact of Equity Policies	111
3	3.5.4 Equity Promotion Policies at the Institutional Level	111
	Figure 19– Household Spending for Higher Education	109
3	3.5.3 Government Equity Promotion Policies	107
	Figure 17 – Gap in GERs between the Urban and Rural Areas Figure 18 - Gap in Higher Education Access Rates Between Kinh/Hoa and Ethnic Minorities	
	Table 60 – Enrollment Rates by Income Quintile	
3	3.5.2 Equity Snapshot	104
	Table 58 - Tertiary Education Gross Enrolment Ratio (%)	104
3	3.5.1 Overview of the Higher Education System	
	The Case of Vietnam	
S	3.4.6 Summary Analysis of Equity in South Africa: Strengths, Challenges and Suggestions	101
	Table 57 – Recent Evolution of the Higher Education Budget	
	Table 56 – Proportion of Black and Colored Students	
٥	3.4.5 What Works: Impact of Equity Policies	
•	Figure 15 – Main Sources of Funding of South African Universities	
	Figure 14 – Public Spending on Tertiary Education as	
3	3.4.3 Government Equity Promotion Policies	
	Table 55 – Proportion of Women in Academic Positions	
	Table 54 – Graduation Rates in Various Programs in Public Institutions	8
	Table 53 – Estimated Subsidy Share by Decile	87
	Table 52 – Individuals with Degrees as % of Economically Active Age Group 15–64	87
3	3.4.2 Equity Snapshot	
	Table 51 – Distribution of Higher Education Enrollment by Main Segment	
	Figure 13 – Gross Enrollment Rates in Tertiary Education in South Africa and Compard 2016 (%)	

4.

	Table 61 – Basic Statistics from the Five Case-Studies	114
	Table 62 – Institutional Dimensions	115
	Table 63 – Definition of Equity Target Groups	116
	Table 64 – Intensity of Support for Equity in Higher Education	116
	4.2 What Works: National Policies	117
	4.2.1 General Observations	117
	4.2.2 Financing Policies	118
	Table 65 – Financing Instruments in Place at the National Level	119
	Table 66 – Student Loan Design	119
	4.2.3 Non-Monetary Policies	120
	Table 67 – Non-Monetary Instruments in Place	120
	Table 68 – Non-Monetary Instruments in Place at the National Level	120
	4.2 What Works: Institutional Policies	121
5.	Conclusion	122
6.	References	123
7.	Annexes	132
	7.1 Template for National Higher Education Equity Policies	132
	7.2 Template for Institutional-Level Equity Policies	135

ACKNOWLEDGEMENTS

My sincere thanks go to Graeme Atherton (National Education Opportunities Network, UK) and Courtney Brown (Lumina Foundation) for initiating and supporting this study. I am grateful for their intellectual guidance and invaluable advice throughout the work. Dozens of people generously helped with this report, providing valuable inputs, insightful advice, and relevant documents: Felipe Acosta, William Alejo, Jhon Jairo Arboleda, Nasima Badsha, Ahmed Bawa, Catherine Burnheim, Carlos Ernesto Castellanos Gutierrez, Harold Castilla Devoz, Liliana Arias Castillo, Bruce Chapman, Jane Finlay, Alejandro Gaviria, Lina María Grisales Franco, Adam Habib, Linda Guarin Gutierrez, Manuel Esteban Acevedo Jaramillo, Alberto Jaramillo, Martha Laverde, Juan Luis Mejia, Oscar Eduardo Moncayo, Javier Mora, Germán Pulido Parra, Luis Fernando Peréz, Ly Pham, Le Dong Phuong, Wilfer Valero Quintero, Carolina Guzmán Ruiz, Katya Salmi, Ingrid Scharcherl, Damtew Teferra, Jorge Tellez, Marta Inés Tirado Gallego, Martin Unger, Servaas Van der Berg, Martha Lucia Vasquez Truisi, Hoang Linh Vu, and Nadine Zacharias. I am grateful for their great contributions. My apologies to those I forgot to mention by name. Special thanks go to the presidents/rectors/vice-chancellors and teams of the following institutions that kindly accepted to participate in this study: Antioquia University, Autonomous University of the Occident, Deakin University, EAFIT, Los Andes University, Uniminuto, University Del Valle, Vienna Academy of Fine Arts in Austria, Witwatersrand University, and Wollongong University. All errors, mistakes and misinterpretations that the report may contain remain my sole responsibility.

Executive Summary

Introduction

A 2018 study sponsored by the Lumina Foundation, *All Around The World*, sought to assess the nature and extent of policy commitments of national governments to promote more equal opportunities in access and success in higher education. The study found that, with the exception of a few fragile states recovering from a natural catastrophe or a major political crisis, equity is a priority theme in the higher education discourse of most governments.

The study identified three promising trends. First, a growing number of countries have realized the importance of combining both financial and non-monetary interventions to remove all barriers faced by students coming from disadvantaged groups. Second, a few governments have begun to complement the direct support offered to students with incentives for the universities themselves, as a means of encouraging them to take a proactive role in improving access and success opportunities. Third, an interesting finding of the survey was the emergence of new sub-categories of equity groups within the broad "minority" classification, such as first-generation students, refugees, migrants, victims of violence/sexual abuse, or students with care experience.

What is the Purpose of the Study?

Against this background, this follow-up study seeks to explore which equity promotion interventions appear to be most successful, and to assess under what conditions some policies work better than others. To achieve this objective, it starts by defining a methodology to analyze and measure, to the extent possible, the effectiveness and impact of equity policies, and then tries to apply this methodology to a small sample of countries that were included in the 2018 All-Around-The-World study: Australia, Austria, Colombia, South Africa and Vietnam.

How Was the Study Carried Out?

This policy research followed a mixed-method approach reflecting the results of the following activities involving (i) a literature review of studies and methods to measure the effectiveness and impact of equity policies in higher education; and case studies of the following five countries representing almost all regions of the world:

- Australia: pioneer in the design and implementation of a national income contingent loan scheme; Australia was identified in the 2018 Lumina study as one of the world leaders in terms of comprehensive equity policies.
- Austria: generous social policies; one of the few Western European countries that experimented with tuition fees for a few years in the last decade.
- Colombia: pioneer in the establishment of the first student loan agency in the world; long-standing tradition of equity promotion policies at the national and regional levels.
- South Africa: comprehensive efforts to eradicate the adverse legacy of the apartheid regime; recently pioneer in introducing a targeted free tuition approach.
- Vietnam: one of the few socialist countries with universal tuition fees in its public universities; affirmative action policies to support students from ethnic minorities.

Data collection relied on an analysis of national policies for promoting equity in higher education and a survey of a small sample of universities in each of the five countries.¹

What Are The Key Findings?

Few Relevant Data are Available to Measure Disparities

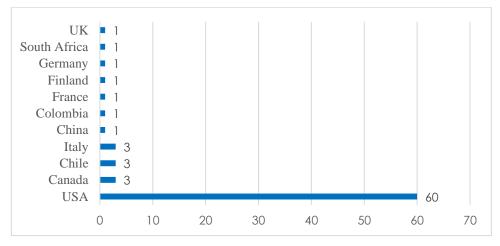
Studies on education disparities and inequitable attainment of education across countries are few and far betweeen. Attempts to measure inequality in higher education are even less frequent, particularly in an international comparative perspective. The study found three notable exceptions:

- a 2011 World Bank reviewed of the range of indicators available to measure disparities in higher education (d'Hombres, 2011);
- a 2016 report published by Pearson looking at the availability of disparity data in 50 countries (Atherton et al, 2016); and
- the UNESCO 2017 Global Monitoring Report, which analyzed data from household surveys in 64 countries comparing differences in enrollment rates between the richest and the poorest income groups (UNESCO, 2017).

The choice of indicators to measure inequalities in higher education is heavily influenced by the availability of data to analyze the situation of each equity group. On the whole, countries tend to focus mainly on participation data, which can then be used only to measure access disparities. Furthermore, there is little consistency in terms of the specific equity groups on which countries collect data. The survey conducted in 2016 by Atherton *et al* revealed that, by and large, gender and socio-economic background are the two variables most often collected across the globe.

Robust Impact Studies of Equity Interventions Are Far and Between

Impact studies of equity interventions exist in a small number of countries, but there are few comparative reviews of these types of studies from an international perspective. Two recent meta reviews of such studies provide useful information on the extent of knowledge in that area. A 2019 World Bank study that looked at 75 impact studies across 11 countries focusing specifically on the effects of equity interventions on disadvantaged groups (Geven and Hervaut, 2019). The great majority comes from the United States.



¹ All six universities contacted in Colombia participated in the survey; of the five contacted in the other countries, only one responded in each country, and none in Vietnam.

Overall the universe of studies reviewed contains twice as many evaluations focusing on access than evaluations looking at success. An important finding of this meta-analysis is that, while most impact studies concentrate only on one specific equity intervention, the few that look at several interventions implemented together reveal that combining interventions makes more of a positive difference than individual interventions designed and implemented in isolation.

The other meta-analysis worth mentioning was commissioned by the UK-based Sutton Trust (Torgerson *et al*, 2014). It reviewed only impact studies from the United States and the United Kingdom, and looked at strategies to improve access and retention generally, without focusing on under-represented groups, as the previously mentioned meta-analysis did. The report established that there was hardly any UK-based study with a sufficiently robust design from a methodological viewpoint. It concluded that the US-based studies that were found to be have been evaluated with a methodologically robust design revealed a number of successful strategies to improve access and retention, including financial assistance and incentives, personal and academic mentoring, broad programs combining financial aid, mentoring, academic enrichment, and counselling.

Australia is one of the most advanced countries in terms of effective equity policies

- Australia stands out as one of the very few countries in the world with a comprehensive higher education equity strategy supported by a wide array of policies, instruments and measures that have both universal and targeted elements.
- The Government of Australia has put in place a comprehensive information system that produces detailed data disaggregated by equity groups to analyze and monitor the equity situation. This has enabled proper targeting, adequate accountability, and performance-based funding.
- With HECS-HELP, Australia has been a pioneer in developing a universal funding system that is at the same time financially sustainable and socially equitable. There is also dedicated equity funding for low socio-economic status and Indigenous students.
- HEPPP has been a catalyst for organisational change by increasing the focus on student equity, promoting understanding of barriers to participation, and creating an expert workforce on equity issues.

Austria is a leader when it comes to gender policies and support for refugees

- Austria has a high enrollment rate, which can largely be attributed to the open-access nature of the higher education system and the absence of financial barriers.
- Gender parity is strong, especially in the public universities and universities of applied science (*Fachhochschule*n). Progress has also been achieved in STEM programs.
- Data collection and monitoring are well established for gender.
- Institutions can be quick to adapt and respond to emergency situations, as they demonstrated with the recent refugee crisis.

Colombia has been a pioneer in student loans and retention policies

• Increased presence of public and private universities in the regions, through face-to-face, distance and virtual programs has helped substantially achieve an impressive expansion of enrolment, with higher participation of low-income students and minorities.

- ICETEX, the first ever student loan agency in the world, has been the principal equity promotion instrument at the national level, effectively helping to increase access and reduce dropouts.
- The Ministry of Education has put in place a comprehensive and innovative MIS with a wealth of information on the characteristics of students in the system, that helps higher education institutions monitor dropout levels, identify the contributing factors, and design appropriate strategies to improve retention.
- The leading public universities have strategies and structures dedicated to equity promotion interventions through financial aid and non-monetary instruments. Some of the private universities have also used government incentives (loans, scholarships) to implement substantial retention programs.
- The Colombian government has included new equity target groups to recognize victims of violence, displaced population groups and gender diversity, among others.

South Africa is trying hard to remove the long-lasting inequalities from apartheid

- A more balanced geographical spread of higher education institutions and campuses throughout the country since the end of apartheid has helped serve under-represented groups and drastically augment the number of black students.
- Improved funding for students from disadvantaged backgrounds through grants and, more recently, the elimination of tuition fees for the lowest income groups has contributed to raise access.
- The Government has put pressure on universities to diversify their racial composition and take in more students from poorer backgrounds. Universities have been responsive in enrolling a more diverse student and academic body.
- South Africa has the largest open university in the continent, offering opportunities to students who cannot access regular higher education institutions.

Vietnam needs to invest more resources to implement its comprehensive equity plan

- Rapid expansion of the higher education system has helped increase the number of students from traditionally under-represented groups (low-income households, rural areas, minority ethnic groups).
- Affirmative action policy, in particular, gives better access opportunities to students from disadvantaged groups and areas.
- Vietnam has achieved good results in reducing the gender gap in higher education in terms of both access and success.
- Tuition exemptions and small scholarships are available to help needy students overcome the financial barriers.
- Student loans help needy students enrol in both public and private institutions.

What Works at the National Level

<u>Need for Impact Studies</u>. The first finding worth underlining is the absence of rigorous impact studies to establish with precision what works and what does not work. Even in Australia, whose comprehensive equity promotion policies can be seen as a model for many countries, there is a dearth of impact studies.

<u>Importance of Strong Databases</u>. The second is the insufficient availability of relevant data to measure disparities and monitor the effects and consequences of equity promotion policies.

<u>Virtues of Alignment</u>. Thirdly, the country studies confirm one of the major findings of the 2018 Lumina study, namely that to achieve good equity results it is essential to have a high degree of alignment among vision of the leadership, policy goals, policy instruments, and resources. Having resources commensurate with the national equity agenda is of particular importance.

<u>Political Continuity</u>. The need for continuity in equity policies is a fourth lesson from the country experiences. The case studies illustrate how politics often get in the way of sound policies. To improve access and success for under-represented groups in the long run, it is important to stay the course and carry on with financial and non-monetary equity promotion policies in a consistent way, independently from political changes.

<u>Supranational Agenda</u>. A fifth observation is that Austria is the only example of a country whose equity promotion policies are influenced and strengthened by supranational considerations in the context of the Bologna process and the social dimension agenda promoted by the European Commission.

Structural Features. Finally, the case studies confirm the interplay of four structural elements that have a strong influence on the scope and magnitude of disparities in higher education: (i) development of the secondary education system and extent of streaming between general education and vocational training within high schools, (ii) level of selectivity in the admission policies of universities, (iii) degree of institutional differentiation of higher education systems, and (iv) availability of financial aid for students from disadvantaged groups.

Financing Instruments in Place

Equity Policy Instrument	Australia	Austria	Colombia	South Africa	Vietnam
No Tuition / Low Tuition in Public Institutions		√	√		
Targeted Free Tuition				√	
Grants & Scholarships	√	1	√	√	7
Student Loans	√	V	V	V	√
Competitive Grants to Institutions	√				
Funding Formula	√	√		V	

Non-Monetary Instruments in Place

Equity Policy Instrument	Australia	Austria	Colombia	South Africa	Vietnam
Outreach / Bridge	√	√	√		
Affirmative Action	√	1	√	√	V
Retention	√	1	√	√	

What Works at the Institutional Level

The review of institutional approaches to promote access and success for under-served students in the five case study countries has revealed a number of good practices worth reporting. The first one is to have a clear strategy that can either take the form of a stand-alone document or be embedded in the institutional strategic plan. Having a department responsible for all equity-related activities under the direct authority of an institutional leader is also an important factor of success. The University of Wollongong in Australia and Uniminuto in Colombia are good examples in that respect. Second, in low- and middle-income countries, partnerships between higher education institutions and firms can generate additional resources to finance scholarships for needy student. Third, the study found several examples of good practices put in place by a single institution being adopted by other institutions or by government itself to design and implement scalable strategies. Finally, experience from Colombia, South Africa and Vietnam points to a special challenge faced by elite public or private universities keen on becoming more inclusive. Beyond ensuring

increased access, it is equally important to provide a welcoming environment for first-generation students who often feel uncomfortable within an elitist institutional culture.

Next Steps

The findings of this report can be translated into five policy recommendations for countries and institutions keen on reducing disparities and offering equal opportunities in higher education:

- Equity policies must be defined in a comprehensive way, taking both financial and non-monetary aspects into consideration, coordinating national-level and institutional level actions in a complementary manner, and putting as much emphasis on success as on access.
- It is important to undertake impact studies to measure which interventions and combinations of interventions are most effective more systematically and rigorously.
- Appropriate monitoring of equity promotion policies requires well-established information systems to identify all equity groups and measure progress in terms of access and graduation.
- More work is needed to identify and evaluate effective policies to improve gender balance in STEM institutions and programs, in the top academic positions, and in university leadership functions.
- Greater priority must be given to students with disability in terms of defining their needs, providing sufficient resources, and empowering higher education institutions to place this dimension high on their equity agenda.

1. Introduction

1.1 Background

A 2018 study sponsored by the Lumina Foundation, *All Around The World*, sought to assess the nature and extent of policy commitments of national governments to promote more equal opportunities in access and success in higher education. The study found that, with the exception of a few fragile states recovering from a natural catastrophe or a major political crisis, equity is a priority theme in the higher education discourse of most governments. This official commitment reflects the fact that young people all over the world are keenly aware that opportunities for professional success and social mobility are directly linked to opportunities in higher education.

However, beyond the official statements about equity, which tend to reflect commonly shared principles of inclusion, the survey found a wide range of situations when it came to translating these principles into actual policies and interventions. A number of countries are still paying only "lip service" to the equity agenda, meaning that they do not spell out clear equity promotion strategies, define concrete targets to enroll and support vulnerable students, mobilize sufficient resources targeted to underrepresented groups, and put in place actions to help students complete their degrees.

The study identified three promising trends. First, a growing number of countries have realized the importance of combining both financial and non-monetary interventions to remove all barriers faced by students coming from disadvantaged groups in a comprehensive way. The most frequently supported non-monetary programs are affirmative action and reformed admission criteria, outreach and bridge programs, and retention programs.

Second, a few governments have begun to complement the direct support offered to students with incentives for the universities themselves, as a means of pressuring the latter into taking a more proactive role in improving access and success opportunities. This is achieved by incorporating an equity indicator into the funding formula, setting up earmarked funds for equity interventions that universities can benefit from, and/or including equity-related criteria in the quality assurance process.

Third, an interesting finding of the survey was the emergence of new sub-categories of equity groups within the broad "minority" classification. Traditionally, minority groups were defined in terms of their ethnic, linguistic, religious, or residence. The survey showed that several countries are considering additional categories, such as first-generation students, refugees, migrants, victims of violence/sexual abuse, students with care experience, etc.

The study also attempted to compare national equity policies internationally from the viewpoint of comprehensiveness and consistency. Thus, the 71 countries surveyed were classified into four equity policy categories: (i) emerging, (ii) developing, (iii) established, and (iv) advanced.

What the 2018 study did not intend, however, was to investigate the effects of equity policies. It did not seek to assess the degree of effectiveness of the various policies formulated and implemented, nor did it attempt to measure their actual impact on the various equity target groups (access, success, labor market outcomes, social mobility) and the overall equity situation in the countries surveyed. Yet, obtaining reliable information on the consequences of equity interventions is a crucial and necessary element for decision-makers and university leaders who

must make choices and allocate resources based on evidence about what works and what does not work.

1.2 Objective

Against this background, this follow-up study seeks to explore which equity promotion interventions appear to be most successful, and to assess under what conditions some policies work better than others. To achieve this objective, it starts by defining a methodology to analyze and measure, to the extent possible, the effectiveness and impact of equity policies, and then tries to apply this methodology to a small sample of countries that were included in the 2018 All-Around-The-World study.

1.3 Methodology

This policy research followed a mixed-method approach reflecting the results of the following activities:

- Literature review of studies and methods to measure the effectiveness and impact of equity policies in higher education.
- Case studies of a small sample of countries that have comprehensive higher education equity policies or have experimented with innovative approaches. The report focuses on the following five countries representing almost all regions of the world, including two industrial nations and three developing countries: (i) Australia (Pacific region), (ii) Austria (Europe), (iii) Colombia (South America), South Africa (Africa) and Vietnam (South-East Asia). The selection of these countries was influenced by the following considerations:
- Australia: pioneer in the design and implementation of a national income contingent loan scheme; Australia was identified in the 2018 Lumina study as one of the world leaders in terms of comprehensive equity policies.
- Austria: generous social policies; one of the few Western European countries that experimented with tuition fees for a few years in the last decade.
- Colombia: pioneer in the establishment of the first student loan agency in the world; long-standing tradition of equity promotion policies at the national and regional levels.
- South Africa: comprehensive efforts to eradicate the adverse legacy of the apartheid regime; recently pioneer in introducing a targeted free tuition approach.
- Vietnam: one of the few socialist countries with universal tuition fees in its public universities; affirmative action policies to support students from ethnic minorities.

For each country case-study, the work involved (i) analyzing relevant documents (official reports, academic studies), (ii) conducting written or video interviews with at least three key experts knowledgeable about equity issues and higher education policies in the respective countries, and (iii) sending a questionnaire to five universities to obtain the institutional perspective on equity policies and programs. For the national level analysis, the work used, when available, household income and expenditures data to measure the evolution of the equity situation. The report also used international statistics from UNESCO, OECD and the World Bank to benchmark the equity situation of the countries studied.

Data collection relied on two instruments: (i) a template to analyze national policies and mechanisms for promoting equity in higher education (Annex 1); and (ii) a template for carrying out the survey of universities in each of the five countries (Annex 2). The following analytical works guided the elaboration of these two templates:

- 2008 OECD study *Tertiary Education for the Knowledge Society*, which defines equity in higher education, looks at the role of higher education in reducing disparities, and reviews country policy responses.
- 2011 World Bank study *Opportunities for All? The Equity Challenge in Tertiary Education*, which proposes an analytical framework to measure the scope of inequalities in higher education, understand their determinants, and assess equity promotion measures.
- 2014 Sutton Trust study *Higher Education Access: Evidence of effectiveness of university access strategies and approaches*, which reviews a number of evaluations of equity programs in the United States and the United Kingdom.
- 2018 Lumina study Access and Completion for Underserved Students: International Perspectives, which explores the range of equity promotion policies that can be observed at the national and institutional levels.
- 2019 World Bank study *What Works to Reduce Inequalities in Higher Education*, which reviews 76 impact studies on retention and financial aid from all over the world.

1.4 Outline of the Study

The report starts with a methodological chapter on approaches to measure the impact of equity promotion policies. It is followed by summaries of each country case study. The last chapter attempts a synthesis of lessons learned, reflecting the cross-cutting findings of the study.

2. Measuring the Impact of Equity Promotion Policies

Not everything that counts can be measured, not everything that can be counted is meaningful. Albert Einstein

From a methodological viewpoint, measuring the impact of equity promotion policies in higher education involves three steps: (i) characterizing the target population groups in a clear manner, (ii) explaining what factors are likely to have a positive effect on the equity situation of the target groups, and (iii) defining appropriate statistical measures to assess the evolution of disparities as a result of various equity promotion interventions.

2.1 Defining and Identifying Equity Target Groups

"Equity target groups" refers to students from under-represented groups in society that governments are meant to recognize and support as part of their national equity promotion policies. However, there is no universally-agreed definition of under-represented groups. Definitions and classifications vary across continents and countries (Salmi and Sursock, 2017). For example, despite the common goal of increased participation in higher education sought by all European countries, the Commission does not have an official European definition of underrepresented groups. In Europe and elsewhere, it is usually left to each country to define its equity target groups, according to its specific social context and political culture.

Building on recent work on equity in higher education, this report considers the following four main equity target groups (OECD, 2008, Salmi and Bassett, 2014):

- Individuals from the lower income groups,
- Women
- Groups with a minority status linked to their ethnic, linguistic, religious, cultural, age or residence characteristics, and
- People with disabilities.

These equity target categories are not mutually exclusive. In fact, quite the opposite is true. The principal dimensions of disparities often overlap in several ways. For example, in countries where females face cultural or religious barriers to study, these barriers tend to be stronger among low-income groups (Bohnet, 2016). Similarly, ethnic minorities tend to be more predominant in rural areas and are more commonly affected by poverty than the dominant groups in society. To sum it up, it would be safe to assume that being a girl with a disability from a low caste in rural India would almost certainly the passport to a life of exclusion and discrimination.

An interesting finding of the 2018 survey carried out as part of the preparation for the first WAHED celebration was the observation that a number of countries have come up with new subcategories of equity groups within the broad "minority" classification. Traditionally, minority groups had been essentially defined in terms of their ethnic, linguistic, religious, or residence characteristics (OECD, 2007; Salmi and Bassett, 2014). But the survey showed that several countries are now including additional categories in their determination of equity target groups, as reported in Table 1.

Table 1 – New Categories of Equity Groups within the Minority Category

Equity Groups	Country Examples	
First-generation students	Australia, United States	
LGBTQIA ²	Brazil, Colombia	
Victims of sexual abuse / violence	Colombia, Ecuador, Spain	
Deported migrants	Ecuador, Mexico	
Children of invalid veterans or civil servants	Mexico, Russia, Vietnam	
Foreign refugees	Australia, Colombia, New Zealand	
Children of military families	England	
Internally-displaced people as a result of civil war or natural catastrophes	Colombia, Georgia	
Demobilized guerrilla fighters and paramilitaries	Colombia	
Students who do not speak the national language	Denmark	
Students with care experience, orphans, youth without parental care	Austria, England, Georgia Kyrgyzstan, Russia, Scotland	
Single mothers	Ecuador	
Families with more than 3 children	Georgia, South Korea	
Children of parents deported during the Soviet era	Georgia	
Jailed people, ex-offenders	Venezuela, Wales	
Students from occupied territories	Georgia	

Source: Salmi (2018)

For instance, a growing number of countries are paying attention to the specific needs for academic, economic and psychological support of first-generation students, who often come from families with limited cultural capital. In Colombia, the government passed a decree in March 2018 to protect the rights of the LGBT community in terms of access to education at all levels. Vietnam identifies, among students in need of support, the children of war veterans who have been left

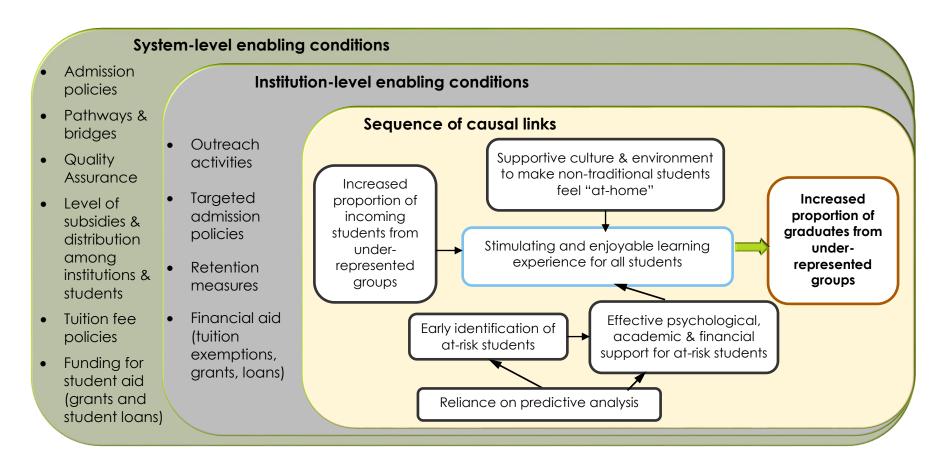
 $^2\,LGBTQIA\ stands\ for\ lesbian,\ gay,\ bisexual,\ transgender,\ intersex,\ queer/questioning,\ as exual,\ and\ others.$

disabled. Even though many countries are challenged by large refugee populations, Australia, Colombia and New Zealand are among the few countries among those surveyed that have specifically identified refugees as an equity group deserving specific measures. Colombia, which has the largest internally-displaced population on the planet as a result of the 50-year long civil war, considers students from this group as an equity category. It is also trying to address the education needs of former guerilla and paramilitary fighters, as well as the 1-million Venezuelan refugees who have arrived in the past two years. This is in sharp contrast with the attitude of the Bangladeshi government, that has strictly prohibited any education institution in the country, from early childhood to university-level, from enrolling any Rohynga refugee (UWN, 2019).

2.2 Formulating a Theory of Change for Equity Promotion

Figure 1 represents the theory of change for reducing disparities in higher education and increasing access and success for students from disadvantaged groups. After identifying two sets of context factors—system-level and institutional level dimensions—that affect the performance of higher education institutions with respect to their equity results, the figure shows a sequence of inputs, interventions and intermediary results that should lead to better equity outcomes.

Figure 1 – Theory of Change for Promoting Equity in Higher Education



2.2.1 System-Level Enabling Conditions

Higher education institutions do not operate in a vacuum. To understand their equity situation and equity promotion results, it is not sufficient to analyze what happens in the institutions alone. It is also essential to consider the key forces at play at the level of what could be called the higher education ecosystem within which universities and other institutions evolve. These forces can have a facilitating or constraining effect, depending on the circumstances (Salmi, 2011).

The higher education ecosystem includes the following key elements specifically influencing the equity situation and results: (i) admission policies, (ii) pathways and bridges, (iii) quality assurance framework, (iv), (v) government subsidies for institutions and students, (vi) tuition fees, and (vii) financial aid.

Admission policies. The extent to which access to higher education institutions is open or selective is a first determinant of the presence of various equity groups. A recent study commissioned by the European Commission identifies four types of admission systems based on the degree of streaming in secondary education—whether there are streams that offer no direct route to higher education—and the freedom of higher education institutions to set their own criteria to choose their students (Orr *et all*, 2017).

<u>Pathways</u>. In countries with a high degree of institutional diversification and, sometimes segmentation, the existence of pathways across types of institutions has a great impact on the education chances of students from under-represented groups. Some countries have national qualifications frameworks designed to facilitate the movement of students from one segment to the other, allowing for easy recognition of qualifications and recognition of prior learning.

Quality Assurance. The 2018 Lumina study showed that a growing number of quality assurance systems were including equity-related criteria for evaluation and/or accreditation purposes to ensure that higher education institutions pay due attention to the inclusion and success of students from under-represented groups (Salmi, 2018).

<u>Level of Public Subsidies</u>. The level of funding of public higher education institutions directly influences the degree to which these institutions need to generate additional income to finance their operation and capital investments, and whether they are able to offer financial aid to needy students and support programs for students at risk of failing and/or dropping out.

<u>Tuition Fee Policies</u>. Countries vary a lot from the viewpoint of tuition fee policies, from well-off countries offering free higher education for all, countries with significant levels of cost sharing, to countries with limited resources giving access to free higher education to the academically best qualified students while charging fees in selective programs that cater directly to labor market needs. The presence or absence of tuition fees in public higher education institutions determines the existence of financial barriers for low-income students.

<u>Financial Aid</u>. The availability of student aid in the form of grants or student loans is a key factor for eliminating financial barriers to higher education in countries with moderate or high levels of tuition fees. An important consideration is whether student aid is available also to students enrolled in private higher education institutions.

2.2.2 Institutional Level Enabling Conditions

Within higher education institutions, a number of measures can influence the access and success of students from various equity groups: (i) outreach activities, (ii) targeted admission policies, (iii) retention programs, and (iv) financial aid.

<u>Outreach</u>. Outreach and bridge interventions linking universities and high schools seek to reduce the academic, aspirational, informational, and personal barriers that restrict access among students from under-represented groups. Academic and career counseling is an important activity within outreach efforts.

<u>Targeted Admission</u>. Offering special admission conditions to students from under-represented groups is one of the ways higher education institutions follow to overcome the deficits these students may have accumulated at lower levels of education.

<u>Retention</u>. To improve the graduation rates of students from disadvantaged groups, higher education institutions use a combination of support mechanisms, including financial, psychological and academic interventions, to accompany at-risk students.

<u>Financial Aid</u>. In addition to the financial aid available from the State, many higher education institutions have their own support mechanisms to help needy students. The financial aid can take the form of tuition exemptions, grants to cover living expenses, or student loans, or any combination of the three.

2.3 Measuring the Evolution of Disparities

Studies on education disparities and inequitable attainment of education across countries are few and far between, with the notable exceptions of Thomas *et al* (2001), Zand and Li (2002), Barros *et al* (2009), and Ferreira and Gignoux (2011). Attempts to measure inequality in higher education are even less frequent, particularly in an international comparative perspective. Three notable exceptions are worth mentioning. A study commissioned by the World Bank reviewed the range of indicators available to measure disparities in higher education (d'Hombres, 2011). A 2016 report published by Pearson looked at the availability of disparity data in 50 countries and drew up a "global access data map" to illustrate the pervasiveness of disparities along the gender and socio-economic background dimensions (Atherton *et al*, 2016). The UNESCO 2017 Global Monitoring Report analyzed data from household surveys in 64 countries to compare differences in enrollment rates between the richest and the poorest income groups across countries (UNESCO, 2017, p.162).

Attempts to measure equity in higher education assume that the proportion of target equity groups should be equal to their share in the general population (Bohonnek *et al*, 2010). With this in mind, assessing the equity situation of various target groups should be carried out along two complementary dimensions: (i) vertical equity, and (ii) horizontal equity (Salmi and Bassett, 2014). The vertical dimension is about the progression of various groups from the moment of entry into higher education until completion of the study cycle. Horizontal equity, which is linked to the degree of institutional diversification of each higher education system, is about having equal opportunities to select from the range of existing institutions and from the full array of academic programs. In each case, equity assessments should take three aspects into consideration:

- Equity of access which measures whether various groups have equal opportunities to enroll in higher education programs and institutions;
- Equity of results which relates to opportunities to advance through the system and successfully complete tertiary level studies; and
- Equity of outcomes which is defined by the labor market outcomes of various equity groups in relation to their higher education qualifications.

In practice, however, the choice of indicators to measure inequalities in higher education along all these dimensions is heavily influenced by the availability of data to analyze the situation of each equity group. On the whole, countries tend to focus mainly on participation data, which can then be used only to measure access disparities.

Furthermore, there is little consistency in terms of the specific equity groups on which countries collect data, as shown by Table 2. The survey conducted in 2016 by Atherton *et al* revealed that, by and large, gender and socio-economic background are the two variables most often collected across the globe.

Table 2 – Number of Countries Collecting Data on Participation for Each Equity Group (Sample = 50 countries)

Equity Groups	Number of Countries
Gender	47
Socio-Economic Background	36
Rural Origin	33
Adult / Mature Learners	33
People with Refugee Status	32
Disability	31
Ethnicity	29
Language	20
Indigenous Groups	16
Religion	14
Others	14

Source: Atherton et al (2016)

Since the institutional configuration of each higher education system is specific to the country where it operates, it would be more appropriate to consider the horizontal dimension of equity in the context of country-specific studies. If, however, the purpose of the analysis is to measure and compare the scope of inequalities across nations, then the comparison would have to be limited to the vertical dimension of equity (progression of groups from admission to completion and beyond).

Selecting appropriate indicators to measure the higher education equity situation of various groups depends on the characteristics of each equity group, based on two criteria. The first consideration is whether there is an inherent ranking among individuals within an equity category. For example, in the case of socio-economic background, the indicator used to define the equity groups is an ordinal variable measured on an interval scale, meaning that there is an inherent ranking among the income groups as the groups can be categorized from poorest to richest. This is a fundamental difference with the variables applied to define the other equity groups, for which there is no inherent ordering. Indeed, since there is no objective criterion of "superiority" or "inferiority" when it comes to comparing females and males, people with disability and people without disability, or members of various minority groups. The variables used for defining these equity groups are non-ordinal categorical variables from a statistical viewpoint (D'Hombres, 2011).

The second consideration is whether the comparison of groups is carried out in an international perspective or within a single country. Synthetic indices that are appropriate for cross-country comparisons cannot necessarily be used for country-specific studies. Measuring and comparing equality of opportunity in higher education across countries requires studying disparities among equity groups that are comparable across countries. This limits the analysis of disparities in an international perspective to income and gender groups. Country-specific studies are more appropriate to cover the remaining two categories of equity groups (minority groups and people with disabilities).

A review of metrics commonly used in studies of income inequality indicates that the following indices can be used as possible measures of disparities in higher education:

- Simple measures of dispersion (range measure, ratio measure)
- Regression-based index
- Population-attributable risk
- Gini coefficient
- Entropy indices / Atkinson index
- Standard deviation
- Coefficient of variation
- Concentration curve and concentration index
- Dissimilarity index

When the objective is to make country-specific studies and when the equity groups under consideration are ordered groups with an inherent ordering (e.g. income groups), the **regression-based indices** and the **concentration index** are better than alternative measures for three reasons. First, the regression-based indices and the concentration index are sensitive to the direction of the social gradient in education and, as such, are more appropriate to measure how educational status varies with socio-economic position. Second, both sets of indicators can be derived from an estimate in a multivariate context, which means that it is possible to control for factors that are simultaneously correlated with educational performance in higher education and the equity group to which the individual belongs. In addition, confidence intervals associated with the estimated disparity indices can be easily computed. Third, they are appropriate for time comparisons given that, in both cases, they depend on disparities between groups and on the proportion of individuals with given characteristics in each of these groups.

Simple measures of dispersion are also useful because they are easy to compute and have a straightforward interpretation. For example, the ratio between the enrollment rate of the richest income quintile) over that of the poorest quintile (Q1) can be used to compare higher education access disparities across countries or to monitor the evolution of disparities by socio-economic background over time within countries and across countries. Moreover, since simple measures of dispersion can be applied to both ordered (e.g., income groups) and unordered groups (gender). In addition, these indicators are not data demanding (aggregated education indicators broken down by equity groups) and could, therefore, be used for large cross-country and time comparisons.

When social groups are unordered groups without an inherent ranking, defined by a binary discrete variable (e.g. gender or migrant status), regression-based indices are most useful for country-specific studies for the reasons mentioned in the previous paragraph. When social groups are unordered groups and defined by a categorical variable (e.g., minority groups such as indigenous students) or by several circumstances combined for the purpose of analysis (e.g., gender, family background and geographical origin), **the dissimilarity index** and / or **entropy indices** should be preferably used. The dissimilarity index is particularly appealing because it is a well-known metric that can be easily understood. Entropy indices are less intuitive, but the generalized entropy index for the entire population can be decomposed into a weighted average of each social group: generalized entropy index (within social group entropy index) and between social group index ("unfair" component of inequality). This enables to assess the respective contribution of inequality within and between social groups in the population.

Table 3 summarizes the advantages and drawbacks of the various disparity measures available for higher education.

Table 3 – Measures of Disparity at the Higher Education Level

Measure Data		Pros	Cons	Level of Analysis	
Ratio	Aggregated by social group	Easy to compute and interpret No restrictions on the characteristics of the grouping variable	If more than 2 groups, intermediary groups not taken into consideration Not sensitive to the distribution of the population among groups	Cross-country comparisons	
Regression- based index	Aggregated by social group and individual data	Indicates which groups are advantaged Possibility to control for other factors Sensitive to distribution of population across groups	Relationship between education variable and social group must be linear	Cross-country comparisons Country-specific studies (if ordered groups such as income groups) or binary discrete variable (gender)	
Entropy indices / Atkinson index	Aggregated by social group and individual data	Entropy indices are decomposable into within and between components Atkinson index can consider the level of aversion to inequality Sensitive to distribution of population between groups	Does not indicate which social groups are disadvantaged Education variable must be continuous	Country-specific studies (if- unordered equity groups or defined by specific circumstances)	
Concentration index	Aggregated by social group and individual data	Indicates which groups are advantaged Possibility to control for other confounding factors Good statistical properties	Equity group must be defined on an interval scale	Cross-country comparisons Country-specific studies (if ordered equity groups, i.e., income)	
Dissimilarity index	Aggregated by social group	Summary index of disparities easy to compute and interpret No restrictions on characteristics of grouping variables	Does not indicate which social groups are disadvantaged	Cross-country comparisons	

Source: d'Hombres, 2011

In summary, it is important to understand the differences among indices that are appropriate for cross-country comparisons and those that are more adapted for country-specific studies. The review of possible inequality measures suggests that cross-country comparisons should be limited to disparities across social groups that are recognizable and can be compared across countries. Such a restriction limits any benchmarking exercise to measuring and comparing disparities in higher education by sex and/or income quintile. Simple measures of dispersion (range and ratio

indicators), can also be appropriate indicators of disparities in higher education. When social groups are defined on the basis of income, the analysis could be complemented by calculating the concentration index or doing a regression-based analysis.

2.4 Measuring the Impact of Equity Interventions

Impact studies of equity interventions exist in a small number of countries, but there are few comparative reviews of these types of studies from an international perspective. Two recent meta reviews of such studies provide useful information on the extent of knowledge in that area. The most recent and comprehensive is a 2019 World Bank study that looked at 75 impact studies across 11 countries focusing specifically on the effects of equity interventions on disadvantaged groups. Figure 2, which shows the geographical distribution of the equity impact studies reviewed, indicates that the great majority comes from the United States.

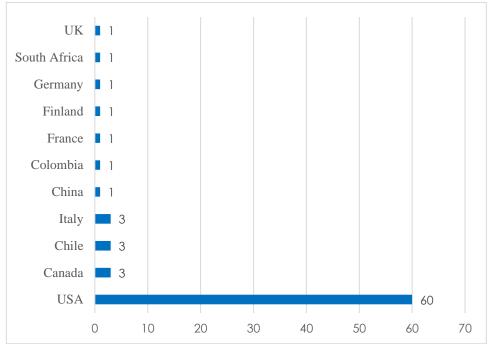


Figure 2 – Geographical Distribution of Equity Impact Studies

Source: Geven and Hervaut (2019)

While some studies analyze the impact of equity interventions on both access and success, overall the universe of studies reviewed by Geven and Hervaut contains twice as many evaluations focusing on access than evaluations looking at success (Table 4). The authors opted for not including affirmative action in their meta-analysis.

Table 4 – Types of Equity Interventions

Interventions	Focus on Access	Focus on Graduation
Outreach	28	4
Financial Aid	28	22
Combined Interventions	7	6
Total	63	32

Source: Geven and Hervaut (2019)

From a methodological viewpoint, the meta-analysis includes only studies with an experimental or quasi experimental design, using any one of five possible designs to measure impact, from randomized experiments to propensity score matching (Figure 3). The strongest methodology for measuring causal relations in the analysis of the effects of equity interventions—randomized experiments— accounts for one third of all studies reviewed. The others relied on quasiexperimental approaches that allowed to assess a counterfactual on the basis of appropriate matching techniques.

Propensity Score Matching Instrumental Variable Differences in Differences Design 15 Regression Discontinuity 17 Randomized Experiments 0 5 10 15 20 25 30 35

Figure 3 – Distribution of Evaluation Designs

Source: Geven and Hervaut (2019)

An important finding of this meta-analysis is that, while most impact studies concentrate only on one specific equity intervention, the few that look at several interventions implemented together reveal that combining interventions makes more of a positive difference than individual interventions designed and implemented in isolation.

The other meta-analysis worth mentioning was commissioned by the UK-based Sutton Trust (Torgerson et al, 2014). However, it reviewed only impact studies from the United States and the United Kingdom, and looked at strategies to improve access and retention generally, without focusing on under-represented groups, as the previously mentioned meta-analysis did. The report established two main findings. First, the review carried out revealed that there was hardly any UK-based study with a sufficiently robust design, from a methodological viewpoint, to warrant firm conclusions about the effectiveness of the access strategies evaluated by the studies under review. Second, the US-based studies that were found to be have been evaluated with a methodologically robust design revealed a number of successful strategies to improve access and retention, including financial assistance and incentives, personal and academic mentoring, broad programs combining financial aid, mentoring, academic enrichment, and counselling.

3. National Case Studies

3.1 The Case of Australia

3.1.1 Overview of the Higher Education System

The Australian higher education system is one of the most advanced in the world. Not only does Australia have the highest tertiary education enrollment rate (Figure 4), but its top universities are research powerhouses. Together with the Chinese universities, Australia is the country that has most progressed in terms of presence of its universities among the top 100 universities in the Shanghai ARWU ranking between 2004 and 2019, from 2 to 7.

140 121.9 120 102.8 93.8 100 81.8 80.9 81.1 80.4 74.4 68.5 73.6 80 61.8 67 68.3 63.7 63.7 60.5 59.259.4 60 40 20 0 Australia Canada Denmark Germany **South Korea** Netherlands **New Zealand** United **OECD** Kingdom Average ■2010 ■2016

Figure 4 – Gross Enrolment Rate of Australia and Comparator Countries (2010-2016) in %

Source: The World Bank – Education Statistics

The rapid progress in terms of enrollment can be appreciated even better when looking at the attainment rate of the adult population, showing that Australia was not the lead country a generation ago (Figure 5).

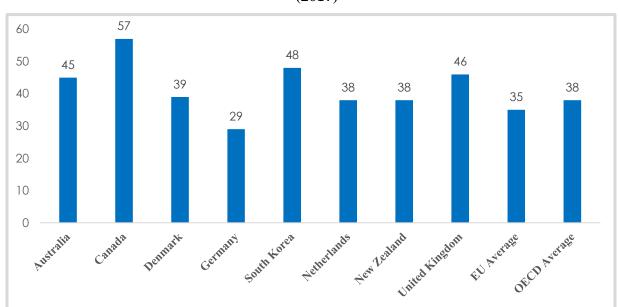


Figure 5 – Attainment Rate of Australia and Comparator Countries in % (2017)

Source: The World Bank – Education Statistics

Forty-four universities operate today in Australia: 38 public, four private, and two foreign universities. In addition, about 135 non-university higher education institutions offer vocationally-oriented programs. Despite a slight decrease in private sector enrollment in the last decade, the majority of students attend public universities still. There is a strong gender parity index, with female students actually being more numerous than men (Table 5).

Table 5 – Enrolment Data by Institution Type, Status and Gender

Categories	2010	2017
Total Enrollment	1,192,657	1,513,383
Full-Time Students	70.3%	71.3%
Enrolled in Public Institutions	93.2%	90.5%
Women	55.6%	55.5%

Source: Australian Department of Education Higher Education Statistics

3.1.2 Equity Snapshot

Available information on the secondary education system reveals serious disparities reflecting the socioeconomic status of high school students.

Even a cursory examination of the distribution of students across school sectors by Index of Community Socio-Educational Advantage quartiles indicates the social segregation of schools in Australia. This measure includes a composite aggregation of factors known to be associated with educational advantage (and disadvantage), such as parental occupation and education, a school's geographical location and the

proportion of Indigenous students enrolled at a school. Based on these characteristics, the Australian schooling system is a stratified one, with learning opportunities mediated through unequal access to academic curriculum, learning resources and experiences, and quality pedagogy (O'Shea, 2019, p 17).

Table 6 gives a comprehensive picture of the equity situation in higher education, revealing impressive progress between 2009 and 2017. The data show that public universities are doing a better job than private universities in terms of reaching equity groups and compensating, to some extent, for disparities at the secondary education level. The participation rates of equity groups have increased in both public and private universities.

Table 6 – Participation Rate by Equity Groups by University Types (2009-2018)³

Equity Crown	2009		2018			
Equity Group	Public	Private	Total	Public	Private	Total
Disability	4.27%	4.04%	4.26%	6.96%	5.13%	6.92%
Indigenous	1.35%	0.44%	1.33%	1.90%	1.63%	1.89%
Low SES Postcode	15.25%	8.23%	15.14%	17.79%	12.21%	17.66%
NESB	3.77%	0.86%	3.72%	3.68%	1.10%	3.62%
Regional	17.99%	7.88%	17.83%	19.44%	8.93%	19.20%
Regional/Remote	19.06%	9.46%	18.90%	20.32%	9.55%	20.07%

Source: Australian Department of Education Higher Education Statistics

Note: NESB = Non-English-Speaking Background

It is also possible to look at detailed data on success, attrition and retention (Tables 7-10). Overall, success rates have decreased for all students, with various results for different equity groups. Since 2009, success rates for Indigenous students and remote students have increased, but they have decreased for students with disabilities, from low SES postcodes, and regional students. Students from Indigenous groups have the lowest success rates but they have experienced the most progress between 2009 and 2017. Similarly, Indigenous students have the highest attrition rates, but retention has improved in the past decade. Students from a non-English speaking background have stayed with the same success rate. Over the same period, attrition rates have decreased slightly or stayed the same across most equity groups.

-

³ The rate is the indicator expressed as a percentage of all domestic onshore students.

Table 7 – Success Rates by Equity Groups (2009-2018)⁴

Year Equity Group		2009			2018	
	Public	Private	Total	Public	Private	Total
Disability	83.44%	84.99%	83.47%	82.35%	87.88%	82.45%
Indigenous	69.58%	80.20%	69.65%	74.14%	72.02%	74.10%
Low SES Postcode	85.32%	87.55%	85.34%	83.76%	81.88%	83.73%
NESB	86.21%	76.94%	86.17%	86.90%	87.09%	86.90%
Regional	87.54%	88.45%	87.55%	86.18%	84.23%	86.16%
Remote	81.55%	85.82%	81.66%	82.83%	89.29%	82.94%
All Students	85.54%	85.44%	85.53%	87.48%	88.12%	87.49%

Source: Australian Department of Education Higher Education Statistics

Table 8 – Attrition Rates (2006-2017)⁵

	2006		2017	
Student Groups	Public Universities	Private Universities	Public Universities	Private Universities
Domestic students	14.51%	13.71%	14.97%	12.57%
Overseas students	10.79%	16.86%	8.76%	22.55%
Total	13.64%	14.12%	13.62%	14.77%

Source: Australian Department of Education Higher Education Statistics

1

⁴ Success rate measures academic performance by comparing the effective full-time student load (EFTSL) of units passed to the EFTSL of units attempted.

⁵ "New Adjusted Attrition rate: The New Adjusted Attrition rate for year (x) is the proportion of students who commenced a course in year(x) who neither complete in year(x) or year (x + 1) nor return in year (x + 1). The new adjusted attrition rate calculation is similar to the normal attrition rate calculation however it is based on a match process using both the StudentID and the Commonwealth Higher Education Student Support Number (CHESSN). This gives a more accurate attrition rate calculation, as it identifies students at either the same or a different higher education institution. In other words, if a student moves from one institution to another in the following year, he or she would be counted as retained in the adjusted attrition rate calculation, but attrited in the normal attrition rate calculation. For the adjusted attrition rate, it is only those students who left the higher education system entirely (that is, they were no longer at any institution) that are counted as attrited" (Australian Government, 2019)

Table 9 – Attrition Rates by Equity Groups, Total Public and Private Universities,
Domestic Students (2006-2017)

Equity Target Group	2006	2017
Females	14.35%	15.03%
Males	14.72%	14.78%
Indigenous	27.86%	27.43%
NESB	9.33%	10.23%
Low SES	16.90%	17.74%
Regional	17.49%	18.80%
Remote	23.38%	20.98%

Source: Australian Department of Education Higher Education Statistics

Table 10 - Retention Rates by Equity Groups, Total Public and Private Universities,

Domestic Students (2006-2017) ⁶

Equity Target Group	2006	2017
Females	85.43%	84.70%
Males	85.06%	84.98%
Indigenous	71.24%	72.38%
Non-English-Speaking Background	90.48%	89.59%
Low SES	82.88%	82.03%
Regional	82.27%	80.87%
Remote	76.32%	78.76%

Source: Australian Department of Education Higher Education Statistics

_

⁶ "New Adjusted Retention rate: The New Adjusted Retention rate for year(x) is the number of students who commenced a bachelor course in year(x) and did not complete in year(x) or year(x + 1), and continued in year(x + 1) (retained students), as a proportion of all students who commenced a bachelor course in year(x) and did not complete in year(x) or year(x + 1). The new adjusted retention rate calculation is similar to the normal retention rate calculation however it is based on a match process using both the StudentID and the Commonwealth Higher Education Student Support Number (CHESSN). This gives a more accurate retention rate calculation, as it identifies students at either the same or a different higher education institution. In other words, if a student moves from one institution to another in the following year, he or she would be counted as retained in the adjusted retention rate calculation, but attrited in the normal retention rate calculation" (Australian Government, 2019)

While gender parity is not an issue in Australia in terms of overall enrollment, there is room for progress in the STEM programs, where women make up less than a third of graduates. This is on par with comparator countries (Table 11).

Table 11 - Share of Female Graduates from STEM Programs in Tertiary Education

Country	2016	
Australia	31.7% **	
Canada	31.4%	
Denmark	33.7%	
Germany	27.1%	
Netherlands	25.3%*	
New Zealand	35.1%	
South Korea	26.4%	
United Kingdom	38.1%	

Source: World Bank Education Statistics * 2014 **2015

There is substantial gender imbalance in graduation rates: women are much more likely to complete their studies and graduate than men (Table 12).

Table 12 – Gross graduation ratio from first degree programs - ISCED 6 & 7 (2016)

Country	Both sexes	Females
Australia	58.9%*	70.9%*
Canada	38.7%	46.9%
Denmark	54.5%**	66.0%**
Germany	42.2%	45.4%
Netherlands	47.5%	54.5%
New Zealand	55.8%**	67.3%**
South Korea	49.4%	52.8%
United Kingdom	53.6% ***	61.1% ***

Source: The World Bank – Education Statistics; Data only available for *2015; **2017 ***2014

Table 13 shows that women are still under-represented in senior academic positions, although the situation has improved in the past decade.

Table 13 – Gender Distribution by Academic Positions

Position	20	08	2018	
Position	Female	Male	Female	Male
Below Lecturer (Level A)	53.2%	46.8%	51.3%	48.7%
Lecturer (Level B)	49.6%	50.4%	53.2%	46.8%
Senior Lecturer (Level C)	39%	61%	45.9%	54.1%
Above Senior Lecturer	25%	75%	34.1%	65.9%

Source: Australian Department of Education Higher Education Statistics

Gender parity in leadership positions is still a remote target. Today, female vice-chancellors represent less than 30% (Table 14).

Table 14 – Proportion of Female Vice-Chancellors

Women	Men	Total
11	28	39
28.2%	71.8%	100

Source: Universities Australia⁷

Finally, data are available to show how graduates from various equity groups fare on the Australian labor market. The employment outcomes of graduates with a disability are poorer than the average population, with a stronger difference in Australia than in the United Kingdom (Table 15).

Table 15 – Employment Rate of Graduates

Labor Market Outcomes	Australia	United Kingdom
With Disability	63%	95%
Average Population	74%	97%

Source: O'Shea, 2019

In addition, available data for Australia show that the proportion of graduates who reported being in a job that not fully utilize their skills was higher for people with disability (44.7%) than the average population (38.9%).

⁷ Only among the 39 universities that are members of "Universities Australia" https://www.universitiesaustralia.edu.au/our-universities/university-contacts/#type=university-vice-chancellors

Similarly, students from lower SES end up with lower labor market outcomes (Table xxx).

Table 16 – Employment Rate of Graduates by SES

Labor Market Outcomes	Undergraduates	All Graduates
High SES	74.9%	88.1%
Medium SES	72.7%	87.2%
Low SES	69.8%	84.7%

Source: O'Shea, 2019

3.1.3 Government Equity Promotion Policies

The Department of Education and Training is the Australian government agency responsible for defining and implementing national educational policies at all levels, including higher education. In March 2018, the Government created the Equity Research and Innovation Panel "to provide strategic advice to the Department [of Education] on Australian Government-funded research and trials on student equity in higher education conducted under the National Priorities Pool component of the HEPPP (Department of Education and Training).

Within the Australian government, the Department of Education Research and Economic Group is responsible for the collection of data pertaining to higher education, including disaggregated student body data and equity-related information.⁸

Australia is quite unique in the world in that the government funds a center dedicated to equity promotion in higher education: the National Center for Student Equity in Higher Education, which was established at Curtin University in 2013. The Center is responsible for bringing together research, policy and practice to advance the participation and success of marginalized and disadvantaged groups in higher education. It produces, analyzes and disseminates research and recommendations to stakeholders (policymakers, practitioners, students, etc...). In addition, the Centre of Excellence for Equity in Higher Education (CEEHE) at the University of Newcastle and the Centre for Higher Education Equity and Diversity Research at La Trobe University both conduct policy research on equity in Australia and beyond.

The Higher Education Support Act 2003 (updated 30 June 2013) is the most important official document defining the country's national higher education priorities. Other policy documents and papers have shaped the country's higher education policy, especially as it relates to equity in higher education. Transforming Australia's Higher Education System (2009) sets out the national higher education strategy and is the government's response to the 2008 Review of Australian Higher Education (Bradley Review). The Bradley Review proposed funding strategies to address the continued challenges to provide equitable higher education.

The Tertiary Education Quality and Standards Agency (TEQSA) also plays an important role in promoting the government's equity policy. TEQSA will ask new and current providers to give evidence for how they meet standards set out in the Threshold Standards published in 2015.

_

⁸ For a detailed list on the data collected from students, please refer to: https://www.education.gov.au/student-data

The Higher Education Standards Framework of 2015 (Threshold Standards) take equity elements into consideration at two levels: in teaching and learning, and in monitoring the recruitment, participation and admission of certain sub-groups.

"Institutional policies, practices and approaches to teaching and learning are designed to accommodate student diversity, including the under-representation and/or disadvantage experienced by identified groups, and create equivalent opportunities for academic success regardless of students' backgrounds. Specific consideration is given to the recruitment, admission, participation and completion of Aboriginal and Torres Strait Islander peoples. Participation, progress, and completion by identified student subgroups are monitored and the findings are used to inform admission policies and improvement of teaching, learning and support strategies for those subgroups." (Higher Education Standards Framework (Threshold Standards, 2015)

Australia has extensive policies to promote equity in higher education. Broadly speaking, the Higher Education Support Act asserts the need for higher education "characterized by quality, diversity and equity of access." The higher education equity policies target specific student groups based on gender, lower socioeconomic status, other characteristics (indigenous populations, remote locations, holders of humanitarian visas, language background), and disability. The precise definition for these groups is as follows:

- Aboriginal and Torres Strait Islanders/Indigenous Australians: A person of aboriginal and/or Torres Strait Islander descent who identifies themselves as an Aboriginal and/or Torres Strait Islander and is accepted as such by the community in which they live.
- Non-English-speaking background: a domestic student who arrived in Australia less than 10 years prior to the year in which the data were collected, and who comes from a home where a language other than English is spoken.
- Student with a Disability: Students who have indicated that they have a disability, impairment or long-term medical condition which may affect their studies.
- Low SES Postcode: The ABS Socio-Economic Indexes for Areas (SEIFA Index of Education and Occupation is used to identify postcodes nationally as low (bottom 25% of the population), medium (middle 50%) or high (top 25%).

The policies set clear targets for equity policies in higher education. For instance, the 2012 Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People (Behrendt Review) introduced targets related to Aboriginal and Torres Strait Islander access and outcomes. The national parity target for this population was initially set at 2.2% (based on data from the 2006 Census) and recommended for reassessment.

In the planning document for 2018-2019, the Department of Education and Training defined the following targets:

- At least 18% of domestic undergraduates are from a low socioeconomic background (based on postcode)
- At least 16% of domestic undergraduates are from a low socioeconomic background (based on Statistical Area level 1)
- At least 2% of higher education students are Indigenous.

Government expenditure on higher education is slightly above average in relation to comparator countries (Table 17).

Table 17 - Government Expenditure on Tertiary Education as % of GDP

Country	2010	2015
Australia	1.2	1.5
Canada	1.9	1.6
Denmark	2.3	2.3
Germany	1.3	1.2
Netherlands	n/a	1.6
New Zealand*	1.7	1.6
South Korea**	0.8	1.0
United Kingdom	0.9	1.3

Source: The World Bank – Education Statistics

Notes: * 2013; ** 2009

Financing Equity Promotion Instruments

The Australian uses three main financing instruments to promote equity in higher education: (i) an income-contingent loan system to take care of the tuition fees, (ii) various grants to help needy students with their living expenditures, and (iii) equity elements within the funding formula to encourage higher education institutions to become more inclusive.

An earlier government abolished university fees in 1974, but they were re-introduced in the 1980s. All public universities charge significant tuition fees that are set by the government. With the reintroduction of fees in 1988, Australia adopted an innovative approach to cost-sharing through its Higher Education Contribution Scheme (HECS). HECS is a universal income-contingent loan scheme, which had never been tried nationally, but which has become a reference world-wide, serving as a model for other countries, starting with New Zealand and the United Kingdom. Australia was indeed a pioneer in establishing the first large-scale income-contingent student loan system in the world. While all students are liable to pay tuition fees in theory, in practice, there is no upfront payment. After graduating, the students only need to pay back once they start earning above a certain level of income. The HECS does not apply to living expenses.

The political economy of the introduction of the income-contingent loan (ICL) scheme is interesting and somehow ironical. Faced with prospective widespread student opposition to tuition fees, which had been previously eliminated with much fanfare by a previous Labor government, Australian policy makers—also from the Labor party—decided to use public funds to pay the fees while students were enrolled, thus considerably alleviating the financial burden on students. All students participating in the HECS were then obligated to repay these fees after completing their higher education as a percentage of their income. The equity dimension in the HECS scheme is that students whose income is below the set ceiling were exempted from repayment. As well, the

government promised that all the revenue would be used for one purpose only, to improve and increase the size of the public university system.

However, the HECS system created a public expenditure challenge at first as a growing number of students enrolled in higher education without having to pay fees upfront. To reduce pressure on the budget, Australia reduced the HECS subsidies in 1997, and universities have since been allowed to charge increasing fees to students. The government introduced three bands of HECS tuition fees (each with a fixed rate of student contribution) and reduced the level of income exempted from HECS repayment. The HECS system was changed to reflect a different value associated with different degrees. HECS was recently renamed as the Higher Education Loan Program (HELP) (Department of Education and Training).

In addition to the universal ICL system, the government of Australia relies on two instruments to offset potential financial difficulties from paying university fees: (i) need-based scholarships and grants; and (ii) a funding formula with equity-related criteria. Firstly, students have access to financial support through the welfare system with key programs such as AusStudy, AbStudy and the Youth Allowance to help their living expenditures. Students can also apply for Rural and Regional Enterprise Scholarships. The HECS-HELP income-contingent loans (see above) support students in Commonwealth supported places (CSP – university places subsidized by the government) ("Study Assist" n.d.).

Second, Australia has built general and specific equity-related financial incentives into the funding formula to allocate public resources to higher education institutions. The incentives are offered on three levels (i) a performance element regarding the achievement of equity targets, (ii) the HEPPP, and (iii) targeted funding for specific equity groups.

The Higher Education Participation and Partnerships Program (HEPPP) is a program with substantial funding designed to be a strong incentive for higher education institutions to promote the access, retention and completion of students from low socio-economic status backgrounds. This program provides funding to institutions to back policies and activities that contribute to the greater participation and retention of needy students. HEPPP grants were made available to higher education institutions through the Higher Education Support Act (2013) ("HEPPP" n.d.). In 2014, HEPPP had a budget of about 180 million Australian Dollars, representing 2.7% of total spending on teaching and learning that year (ACIL Allen Consulting, 2017). In 2018, HEPPP funding represented close to 1,000 dollars per SES student. Within HEPPP, the National Priority Pool supports projects that inform more effective implementation of the HEPPP and collaboration between universities.

One advantage of HEPPP is that it can be tailored to each institution. Universities do not all have to target the same equity issues or the same communities. Instead, they can focus on the most pressing needs of their institution and surrounding community to better address those specific equity needs. Much has been done in tandem and partnership with schools/local institutions and stakeholders (NCSEHE 2017).

The "Indigenous Student Success Program" provides support to universities for improving the higher education access and attainment of Aboriginal and Torres Strait Islander persons (National Indigenous Australians Agency, n.d.). Similarly, the Disability Support Program allocates funding to eligible higher education institutions to back their activities that promote access of students with disabilities.

In November 2018, the Government announced \$134.8 million over four years to provide students from rural and regional Australia with greater choice in and access to higher education. These funds include scholarships, financial support to specific regional universities (e.g. James Cook University and Central Queensland University, and Regional Study Hubs.

In October 2019, the Australian Department of Education announced the new design of the 2020 Performance Based Funding for higher education. Equity is part of the four core measures, which are "graduate employment outcomes, student experience, student success and equity group participation by Indigenous, low socio-economic status and regional/remote students"

Non-Monetary Equity Promotion Instruments

Alongside the financial incentives in support of institutional efforts, the Australian government also promotes several programs to promote equity:

- Academic and career guidance and counseling, funded by a combination of Indigenous Student Success Program (ISSP) and institutional resources (for example the Indigenous Higher Education Units) ((National Indigenous Australians Agency, n.d.).
- Retention programs, funded by a combination of HEPPP, Student Services and Amenities Fees (SSAF) and institutional moneys.
- Regional Study Hubs for students studying long distance from partner universities. This new program allows stakeholders to apply for funding to support students who stay local, while studying remotely with other Australian universities ("Access and Participation" n.d.).

Since the Australian higher education institutions have direct responsibility for implementing these programs, the following section provides more detail about what happens on the ground.

3.1.4 Equity Promotion Policies at the Institutional Level

At the behest of the government, universities in Australia have taken on the challenge of promoting higher education equity. Many equity focused initiatives in higher education have been enabled by HEPPP funding. The following examples illustrate various facets of these equity promotion initiatives at the institutional level:

- Access and Participation. The University of Western Australia (UWA) has an alternative entrance pathway through "Fairway UWA," a program aimed at disadvantaged secondary students with high academic potential. Fairway students who successfully complete the program benefit from a 10 points reduction in their admissions requirements.
- Special Equity Groups. The University of Newcastle's "Live, Learn, Grow" program targets the needs of students who have a care experience (foster or residential care), to encourage them in their higher education journey. The university offers specified support that includes subsidized on-campus accommodation, support in academic and social life, and supported employment. Similarly, the University of Newcastle (UON)'s innovative program Live, Learn, Grow seeks to overcome the known barriers preventing students from a care experience—such as foster or residential care—from engaging with higher education. The program is the first of its kind to provide care leavers with a range of tailored support services including subsidised on-campus accommodation, supported employment and academic/social support.

• Gender Equity. University of Technology Sydney is taking proactive steps to ensure gender parity in its incoming 2020 freshman class. With approval from the NSW Anti-Discrimination Board, the university is making a 10-point adjustment to the entrance scores of female applicants. This will help address the access and participation gender imbalance, but once in the program, all students will need to meet the same requirements (Martin, 2019).

Finally, it is useful to look at the efforts of one university in more detail. Box 1 illustrates how The University of Wollongong, which kindly agreed to participate in a survey directed at Australian universities in the context of the present study, organizes its equity promotion efforts.

Box 1 - Good Practices at the Institutional Level: the Case of Wollongong University

Insights into the actual implementation of equity promotion measures by individual institutions can usefully complement the analysis of government policies. It can also provide relevant inform on how universities can shape their own unique approach to enhancing equity in their institution. In that respect, the University of Wollongong (UOW) is an exemplary case study into the implementation of equity policy in Australia.

Clear Targets

The University of Wollongong sets clear targets, which are embedded into the equity strategy. UOA aims to increase the participation of students from lower socio-economic background to more than 21% and that of Aboriginal or Torres Strait Islander students to more than 2.5% by 2020 (from 2.37 in 2018). The main equity target groups are low socioeconomic students, regional, rural and remote students and Aboriginal and Torres Strait Islander students.

Equity Programs

UOW has a good mix of financial and non-financial instruments to reach these targets. Key programs implemented by the University include:

- Outreach programs;
- Contextualized access and participation programs;
- Transition programs (bridging programs, faculty trainings);
- Programs targeting first generation students;
- Alumni programs;
- Scholarships; and
- Needs-based post-graduate commonwealth supported places.

Monitoring and Data Collection

As seen throughout this report, data collection on equity groups and the equity situation is integral to advancing equity in higher education. The University of Wollongong has a robust data collection strategy, gathering data on different equity groups to continuously measure access, participation, success and completion. The groups include students from lower socioeconomic

backgrounds, students from regional, rural and remote areas, Aboriginal or Torres Strait Islander students, and students with disabilities.

UOW has defined and is piloting its own Equity Evaluation Framework to monitor equity-focused programs. All academic programs report quarterly on engagement and progress of initiatives and the impact on access and retention.

Source: Wollongong University Case Study

3.1.5 What Works: Impact of Equity Policies

The 2018 Lumina study found that Australia was one of the leading countries in the world with respect to equity policy in higher education, owing to the fact that it showed "a great degree of consistency over time in terms of comprehensive strategy, policies, goals and targets, and alignment between their equity goals and the range of instruments—financial and non-monetary—used to promote equity in higher education" (Salmi, 2018, p. 44). This year's case study confirms that Australia has clear policy objectives, well-defined equity target groups, concrete targets for improvement, and a broad range of policy instruments supported by adequate funding.

One of the outstanding features of the Australian case is that it is one of the countries that has done most in terms of putting in place a solid information system that allows the government and the universities to monitor the equity situation and the evolution of disparities in higher education in an effective manner. A recent survey comparing the availability of equity data in Australia, New Zealand, the United Kingdom and the United States found that Australia had the most extensive set of data on the labor market outcomes of graduates (O'Shea, 2019). Of particular usefulness, in the Australian case, are the Graduate Outcomes Survey and the Quality Indicators for Teaching and Learning (Social Research Center, QILT).

The only missing element is that the Australian government has not gone one step further to commission rigorous impact evaluations that would measure the impact of equity policies in an objective way. In the absence of such studies, this section summarizes what is known about the results of the national and institutional equity policies.

A 2014 study by Ian Li and Michael Dockery shows that, overall, the higher education system in Australia seems to work well to compensate for disparities of students' socioeconomic status and schools or performance in secondary school.

Schools' socioeconomic status is found to have moderate impacts on university performance. In particular, students from schools with lower socioeconomic status are found to perform modestly better than their peers from schools with higher socioeconomic status. Second, school sector is found to have negligible impacts on their students' subsequent academic performance at university. Third, school resources are not found to have any impact in influencing student outcomes at university. Fourth, prior academic achievement of the students, as proxied by ATAR scores, is found to be a strong determinant of first-year university scores. (Li & Dockery, 2014)

The data shown earlier (Table 7) confirm the significant progress achieved in the past decade to improve access and success for under-represented groups.

Effects of Financing Instruments

Evaluations of the impact of HECS-HELP have found that the income-contingent student loan scheme has been an important instrument for the elimination of financial barriers in Australia (Chapman & Nicholls, 2013; Ey, 2018; James *et al*, 2013).

The evidence is compelling that HECS achieved its intended social outcomes by successfully facilitating expansion of the higher education system and graduate population without compromising access. Although the introduction of HECS meant that students were faced with fees—albeit deferred—the revenue HECS provided to universities created places for many who were previously turned away. Following implementation, much of the unmet demand by school completers was met and growth in the number of domestic students outpaced population growth, increasing from 2.3 per cent of the estimated resident population in 1985 to 3.3 per cent by 1995. By 2016, the higher education sector's domestic student load (in equivalent full-time student load) had reached 740,223—more than double the 1987 level—and more than 2.5 million individuals have now benefited from the scheme... Research undertaken soon after its implementation found HECS had little effect on deterring enrolments. While absolute increases in participation numbers were higher among more advantaged students, there was little change in the proportions of applicants from different socioeconomic groups... Changes to HECS parameters over the intervening years have pushed a greater share of costs on to students, but despite these and other changes, research has shown that, on balance, neither the introduction of HECS nor subsequent policy change has significantly affected participation or the socioeconomic mix of students attending university (Higgins, 2019, pp.3-4).

Beyond the income-contingent student loan program, the Australian government has relied on several financial instruments to promote equity, as outlined earlier. Table 18 analyzes key characteristics of the various instruments in place.

Table 18 – Financial Instruments in Support of Equity

Instruments Characteristics	ICL	Scholarships & Grants	Grants to Institutions	Funding Formula
Universal / Targeted	Targeted to individuals	Targeted to individuals	Targeted to institutions	Targeted to institutions
Progressive	+++	+++	+++	+
Financial Cost	High at beginning, now sustainable	++	++	No additional cost
Technical Difficulty	+++	+	+	++
Political Difficulty	++	+	+	++

Source: Elaborated by Jamil Salmi

Finally, it is worth noting that, in recent years, the Conservative government has put restrictions on higher education funding, which may adversely affect the amount of resources available for equity promotion. The current state of affairs is that the higher education system was effectively "re-capped" by imposing a budget freeze through the 2017 budget process. Universities received the same funding amount in 2018 and 2019 as they did in 2017. The only way to increase their budget has been to diversify their funding sources without government support.

Effects of Non-Monetary Instruments

HEPPP has been a successful funding program to date. A main reason for its success is the diverse nature that interventions can take. As a recent NCSEHE (2017) evaluation of HEPPP programs over the last seven years notes: "HEPPP has provided universities with the flexibility to develop bespoke equity programs which align with their institutional profile and strategic priorities." As Zacharias notes (2017) "Drivers of change included the volume of HEPPP funding, universities' missions and values, and influential equity directors or other senior champions of widening participation."

According to a 2017 evaluation report commissioned by Australia's Department of Education, the following results were achieved between 2010-2015 (ACIL Allen Consulting 2017):

- Some 2,679 projects were implemented at the 37 eligible universities.
- Over 310,000 students have participated in HEPPP projects, with additional students supported in schools and other institutions.
- At least 2,913 partner organizations participated in HEPPP outreach activities.
- More than 40 per cent of projects and expenditure have been targeted at assisting low SES students transition into, engage with and progress through university.

• Around 40 per cent of projects have worked with external partners, usually schools, to increase low SES applications to university.

However, the report found that there were issues with significant targeting issues and recommended more rigorous data collection and evaluation efforts to determine the actual effectiveness and impact of HEPPP. It insisted on the need to enhance the monitoring and evaluation of indigenous higher education as part of equity strategy (Smith, et al 2018).

Not all of the HEPPP funding is targeting the intended low SES cohort. A majority of projects at Pre-Access stage target low SES. In the Participation stage [however] some projects are aimed at other equity groups or at the total student cohort... Amongst other results, the evaluation showed the HEPPP projects were poorly targeted to low SES. Available data were largely qualitative ... and inadequate for assessing the causal contribution of the HEPPP. (NCSEHE, 2017)

3.1.6 Summary Analysis of Equity in Australia: Strengths, Challenges and Suggestions Strengths

- Australia stands out as one of the very few countries in the world with a comprehensive higher education equity strategy supported by a wide array of policies, instruments and measures that have both universal and targeted elements. There is a clear alignment between the national policy objectives and targets, on the one hand, and the set of policy mechanisms to achieve these targets, on the other hand.
- The Government of Australia has put in place a comprehensive information system that produces detailed data disaggregated by equity groups to analyze and monitor the equity situation. This has enabled proper targeting, adequate accountability, and performance-based funding.
- With HECS-HELP, Australia has been a pioneer in developing a universal funding system that is at the same time financially sustainable and socially equitable. At the same time there is dedicated equity funding for low socio-economic status students (Higher Education Participation and Partnerships fund) and Indigenous students (various schemes).
- HEPPP has been a catalyst for organisational change by increasing the focus on student equity, promoting understanding of barriers to participation, and creating an expert workforce on equity issues. Universities can apply the funding in a way that reflects the unique equity challenges in their institution and address the needs of the population and community that they most serve.

Challenges

- Comprehensive equity promotion policies in higher education have not been enough to offset structural inequality of outcomes in secondary education, even though Australia has lower financial barriers to entry than most other countries.
- While the Australian higher education data system is advanced in many ways and captures details about equity for key target groups, available data does not disaggregate enough with respect to race/ethnicity. This is especially important for monitoring of HEPPPs.

- The lack of continuity in national leadership, policy direction, and funding in recent years, which limits the availability of university places, presents risks for the enduring success of equity policies in higher education.
- Disability support funding has not kept pace with increasing needs for support for students with different forms of disability, particularly students with mental health issues.
- The disconnect between vocational training institutions and universities has resulted in limited pathways for lower SES students.

Suggestions

- It would be important to align better efforts to reduce disparities in secondary education and equity promotion policies at the higher education level.
- At their end, universities could fund and manage more access programs to ease entrance requirements and provide alternative pathways with the purpose of increasing the access and participation of lower SES students.
- Notwithstanding the excellent and comprehensive database on disparities existing in Australia, effective monitoring and evaluation of indigenous higher education would require more detailed information.
- Increased funding is required to guarantee that students with disability receive the necessary attention and support to be successful in higher education.
- Better integration of the vocational training institutions with the universities could offer more flexible pathways to lower SES students.

3.2 The Case of Austria

3.2.1 Overview of the Higher Education System

The Austrian higher education system is a mass system with an enrollment rate of close to 84%, well above the European Union average, and one of the highest among OECD countries (Figure xxx). which can largely be attributed to the open-access nature of the higher education system and the lack of tuition fees.

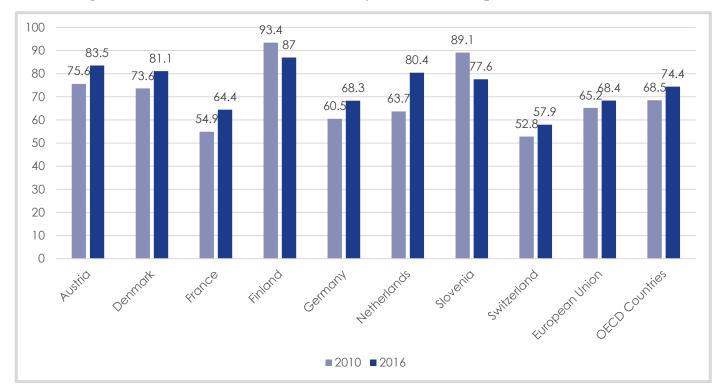


Figure 6 – Gross Enrollment Ratio Tertiary Education Comparator Countries (%)

Source: The World Bank – Education Statistics; *Germany data only available for 2013

There are four main types of institutions with different funding streams: public universities, Universities of Applies Sciences (*Fachhochschulen*), private universities, and university colleges of teacher education. As illustrated by Table 19, the Austrian higher education system is predominantly public (82.2%).

Table 19 – Number of Institutions and Enrolment by Type of Institution (2010-2018)

Type of Institution	Institutions (2017)	Enrollment 2010	Enrollment 2018	% of Enrollment
Public Universities	22	265,030	268,586	78.4
Universities of Applied Sciences (Fachhochschulen)	21	37,564	53,401	14.1
Private Universities	13	6,301	14,446	2.4
University Colleges of Teacher Education	17	n/a	15,200*	5.1
Total	73		351,633	100.0

^{*}Data available for 2015 Source for enrollment: Austrian higher education data; for institutions (OeAD 2017)

Together with Germany, Austria is one of the few Western European countries that has experimented with introducing tuition fees during the last decade. Tuition fees came in force between 2001 and 2009 because of a favorable political climate and a new government coalition that was keen on reducing public spending and reducing internal inefficiency. During this period students across all programs had to pay €363 per semester. However, this experimentation with fees was short-lived and the new government that came to power in 2009 overturned this policy for the public universities. Some universities of applied sciences, but not all, continue however to charge fees, depending on the local state government.

3.2.2 Equity Snapshot

Any analysis of the equity situation in the Austrian higher education system is hampered by the lack of data, except for gender. There is no tradition of collecting data on the socio-economic origin of students. There is also a philosophical resistance to collecting statistics on the ethnoracial composition of students. To circumvent this limitation, attempts are made to analyze social issues through proxies, such as the educational level of the students' parents and their migration background. Data from the 2015 Social Survey show a substantial gap linked to parental education in the sense that children of parents with higher education are over-represented among first-year students (Table 20).

⁹A similar story happened inn Germany, but on a state by state basis. Legal changes at the state level led to the introduction of fees in seven states in 2005. As happened in Austria, later changes in government at the state level led to the abolition of fees in those states. Most universities maintained their tuition-free position until recently, when fees were introduced for international students.

Table 20 – Share of Students with One Parent Having Attained Higher Education, by Immigrant Status

Reference Group	Parents Have Higher Education	Parents Do Not Have Higher Education
New Students	25%	75%
Parent Generation	12%	88%

Source: 2015 Social Survey

In Austria as in most other nations, social disparities that are observed at the higher education level start earlier in the education system. According to OECD Education at a Glance 2019, socioeconomic background has a greater impact on secondary students in Austria than in other OECD countries. Variation in PISA performance attributed the students' socio-economic background is 15.9% (compared to 12.9% for the OECD average).

However, when looking at regional comparators, it appears that Austria is doing better than other European countries, at least for children of Austrian residents (Table 21). But the Netherlands is doing a better job getting children of immigrant families into higher education. The situation of the latter group is an area of concern in Austria. A recent EU assessment found that, while across Europe the gap between native students and children of immigrant families went down from 10.5% to 3.8% between 2000 and 2017, in Austria it actually increased from 1.1% to 5.7% (European Commission, 2018).

Table 21 – Share of Students with One Parent Having Attained Tertiary Education, by Immigrant Status (%)

Country	Both parents are native born	Both parents are foreign born	One parent is foreign born
Austria	37	53	n/a
Denmark	65	72	83
Finland	68	n/a	n/a
France	76	74	83
Germany	55	58	64
Netherlands	64	49	67
Slovenia	65	n/a	46

Source: OECD Statistics

Equally worrisome is the fact that, at almost 24%, Austria has the highest proportion of NEETs among OECD countries, that is the proportion of foreign-born youths age 15-29 who are neither in school or employed, compared to 8% for the native-born population.

Table 22 – Proportion of Native and Foreign-Born 15-29 NEETs (2017)

Country	Native-Born	Foreign-Born	Total
Austria	7.7	23.9	10.8
Denmark	11.1	16.6	11.8
France	14	17.2	16.5
Germany	6.6	24.1	9.3
Netherlands	6.4	17.1	7.5
Slovenia	9.9	23.8	10.9
Switzerland	6.5	14.8	8.4
EU Average	12.4	19.8	13.4
OECD Average	12.7	18.4	13.4

Source: OECD Education at a Glance 2018

One of the issues faced by the Austrian higher education system is the relatively low graduation rate for both sexes, compared to neighboring countries (Table 23). Graduation rates in relation to parental education are not available, but it is probable that students from traditionally underrepresented groups account for a higher proportion among students who do not graduate on time or do not graduate at all.

Table 23 – Gross Graduation Ratio from First Degree Programs (2016)

Country	Both Sexes	Females
Austria	35.8	43.5
Denmark**	54.5	66.0
France	46.4	54.0
Finland	52.9	64.5
Germany	42.2	45.4
Netherlands	47.5	54.5
Slovenia	102.7	125.0
Switzerland*	51.2	50.9

Source: The World Bank – Education Statistics; Data only available for *2015; **2017

Gender balance is one area where Austria is doing very well. Table 24 shows that girls have become the majority group in terms of both enrollment and graduation, and even more so in private universities than in public universities. This is also true in the universities of applied sciences (*Fachhochschulen*), where the proportion of female students has significantly increased in the past decade.

Table 24 – Enrolment and Graduation by Gender and Type of Institution (2008-2018)

	Enrolme	nt 2008	Gradu 2007		Enrolment 2018		2018 Graduation 2017/18	
	Women	Men	Women	Men	Women	Men	Women	Men
Public Universities	53.8%	46.2%	56%	44%	53.5%	46.5%	54.8%	45.2%
Private Universities	54.7%	45.3%	55%	45%	61%	39%	65.7%	34.3%
Fachhochschulen	45.8%	54.2%	43.1%	56.9%	49.8%	50.2%	51.5%	48.5%

Source: Austrian Higher Education Statistics

In spite of these good results overall, the proportion of females in STEM programs is still quite low in Austria, as happens in many Western European countries. Table 25 shows that Austria has a smaller proportion than Germany, and is much lower than France.

Table 25 – Percentage of Female Graduates from STEM in Tertiary Education

Country	2016
Austria	14.3
Denmark	12.2
Finland	13.5
France	31.8
Germany	19.3
Netherlands	6.3*
Slovenia	12.5
Switzerland	11.1

Source: The World Bank – Education Statistics; *2014

A related area of concern is about the presence of women among top academics. Table 26, which presents the proportion of female academics at various levels of seniority, clearly reveals a lower share of women the higher one moves on the scale. The proportion for the lowest rank (lecturer) is twice as high as for the highest rank (full professor).

Table 26 – Distribution of Academic Ranks by Gender

	Winter	2015	Winter 2018		
	Women	Men	Women	Men	
Full Professor	21.7%	78.3%	23.6%	76.4%	
Professor	23.6%	76.4%	24.6%	75.4%	
Associate Professor	29.2%	70.8%	32.7%	67.3%	
Assistant Professor	38.4%	61.6%	43.8%	56.3%	
Senior Lecturer	52.4%	47.6%	51.7%	48.3%	
Lecturer	45.8%	54.2%	46.6%	53.4%	

Source: Austrian higher education data

More significant progress has been achieved, though, when it comes to the access of women to university leadership positions (Table 27). In fact, Austria has one of the highest proportions in the world, with a third of university heads being women. This is much higher than the European average of 10.3%.

Table 27 – Gender Distribution for High Level Positions in Austrian Universities

	Winter ser	nester 2008	Winter semester 2018		
	Women Men		Women	Men	
Rector	5%	95%	33.3%	66.7%	
Vice-Rector	32.9%	67.1%	50.0%	50.0%	
President of Academic Senate	21.7%	78.3%	18.2%	81.8%	
Department Heads	14.5%	85.5%	23.1%	76.9%	
Arts and Sciences Faculty Members	16.8%	83.2%	25.1%	74.9%	

Source: Austrian higher education data (unidata.gv.at)

3.2.3 Government Equity Promotion Policies

The Austrian Federal Ministry of Education, Science and Research is responsible for setting higher education policy. Since the 2002 governance reform, it has played more of a supervisory role by law, allowing universities to be responsible for institutional operation in an autonomous manner (Orr, Wespel, & Usher 2014). The Ministry oversees both universities and *Fachhochschulen*. The Austria Science Board (*Wissenschaftsrat*) works at the federal and state levels advising on higher education and research issues (OECD 2017).

The Universities Act of 2002 brought in significant changes to the Austrian university system, with universities, rather than the ministry, taking the lead in university governance and managing institutional affairs (Orr, Wespel, & Usher 2014). The University Development Plan was updated in 2018 and Performance Agreements for the 2019-2024 period were put in place recently (European Commission/EACEA/Eurydice 2019).

Austria does not have an agency dedicated to equity promotion in higher education. This role is assumed by the Federal Ministry of Education, Science and Research. The principal policy document for equity promotion is the National Strategy on the Social Dimension of Higher Education, which was adopted in 2017 by the Ministry in the context of the implementation of the Bologna Process. It outlines three overarching equity goals: (i) bringing about more inclusive access, (ii) avoiding drop-out and improving academic success, and (iii) creating basic parameters to optimize the regulation of higher education policy.

The National Strategy on the Social Dimension is influenced by the supranational policies that Austria is bound to implement in the context of the Bologna Process, which sets standards for all the countries in the European Higher Education Area. The European Union has targets and benchmarks for member states to meet with respect to widening participation and access to higher education. The European Council also shapes higher education in the EU. In 2008, for example, it adopted an EU-wide benchmark of 40 % of the 30-34-year-old to be receiving a tertiary or equivalent level qualification by 2020 (European Council 2009). The European Commission set forth the following indicators to meet EU-wide benchmarks:

- Quantitative targets for widening participation of under-represented groups;
- Systemic monitoring of the characteristics of the student body;
- Recognition of informal and non-formal learning on entry to higher education;
- Completion rates as a requirement in external quality assurance; and
- Performance-based funding mechanisms with a social dimension focus.

To achieve these targets, Austria has defined a number of equity target groups based on household income, gender, minority status (regional, migration), disability and care responsibilities. Specifically, the social dimension policy identifies under-represented groups and students with special needs as follows:

- (i) Underrepresented groups:
 - Students whose parents do not have higher education entrance qualifications or who come from lower socio-economic backgrounds (currently around 40%).
 - Women or men who are under-represented in particular degree programs (e.g. women in technical studies, men in veterinary medicine studies).
 - Students from particular regions/federal states.
 - Students with migrant backgrounds (with an Austrian entrance qualification).
 - Students with a disability and/or chronic illness.

- (ii) Students with special needs:
 - Students with young children or other care responsibilities.
 - Students with a disability and/or chronic illness.
 - Students with delayed entry to higher education (i.e. at least two years since leaving school or "second chance" education).
 - Students in employment.

The National Strategy on the Social Dimension of Higher Education specifies the following goals and targets:

- Increase the number of "educationally disadvantaged" students in higher education by (a) reducing the recruitment quota/probability factor for admission to higher education to 2.25 (2020) and 2.10 (2025), and (b) decreasing the discrepancy in the probability factors between public universities and universities of applied sciences, including private universities and university colleges of teacher education in the calculation of probability factors, adaption of target values.
- Widen inclusive access by increasing the number of non-traditional admissions (educational residents) to higher education from the current 4,000 to 5,300.
- Promote gender balance in all degree programs by (a) requiring a minimum percentage of 10% men or women in any degree program (excluding doctoral study) and at any higher education institution, (b) halving the number of degree programs at each higher education institution where men or women comprise less than 30%.
- Widen participation by (a) increasing the percentage of (educational resident) students admitted to higher education who are second generation children of immigrants from 22% to 30%, and (b) increasing the percentage of students admitted to higher education in all federal states to 42% by 2025 and towards the Austrian average (47%) with reference to the entire education and vocational education system.
- Establish recognition of the social dimension in mobility by increasing participation in overseas study programs by students whose parents have no university entrance qualifications, to at least 18%.
- With respect to improved compatibility, increase the number of vocational places at universities of applied science to 50%.
- Increase the number of self-supporting students receiving maintenance grants to 15,000.
- Promote equal opportunity in medical and dental courses by increasing the percentage of student admissions from homes where neither parent has a university degree.

The Federal Government has two policy documents regarding gender balance:

- Federal Law for Equal Treatment in Federal Bodies calls for affirmative action in areas in which women are underrepresented, which applies to the 22 Austrian public universities.
- Austrian University Act has specific gender equity provisions. Source: European Institute for Gender Equality (EIAG n.d.)

Financial Equity Promotion Instruments

Public universities charge minimal fees. Austria can afford to offer free higher education because of its high level of public spending in the sector, as shown by Figure 7. At 1.6%, the GDP share of public spending on higher education is much higher than the OECD average of 0.9%.

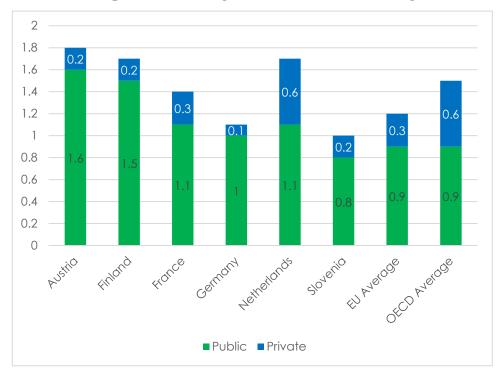


Figure 7 – Total Expenditure on Higher Education as Percentage of GDP (2016)

Source: OECD Education at a Glance 2019

In addition, the federal government offers several needs-based grants, including:

- Student support grants based on financial need (family) and merit (*Studienbeihilfenbehörde*). Student support can be direct or indirect: direct financial aid is paid directly to students for study grants, travel allowances, study periods abroad, etc...). Indirect aid is paid to parents or a third party and can include family allowances, students' health and accident insurance or subsidies for access to university cafeterias and student accommodation.
- Needs based scholarships to support scientific and artistic theses.
- Small amounts for study assistance are available to students undergoing financial hardship to cover their housing costs, for instance.

Student loans are available to students who pay tuition fees in the universities of applied science and the private higher education institutions. These students can apply for private bank loans, with the Ministry of Education covering part of the interest rate. The loans are intended to cover tuition fees only. They are available to students who are under 35 at the beginning of their studies.

In 2019, a new funding model was introduced to allocate the budget of the public higher education institutions. The model considers student data such as enrolment and graduation rates, teacher-students ratio, and time to completion. It also has a clause whereby the federal government would

retain 0.5% of the total amount when universities do not produce a social dimension set of actions within their performance plan.

Between 2001 and 2009l, Austria experimented with tuition fees in its public higher education institutions (Box 1). Table 28 show that the introduction of fees had an initially adverse impact the first year, with a noticeable drop in enrollment affecting men more than women, but that enrollment climbed back to a normal level in the following years.

Table 28 - Total Enrolment in Universities 2000-2008

Year	Total Enrollment
Winter 2000	227,948
Winter 2001	182,805
Winter 2002	186,226
Winter 2003	192,560
Winter 2004	195,763
Winter 2005	203,453
Winter 2006	209,416
Winter 2007	217,587
Winter 2008	223,562

Source: Austrian higher education data (unidata.gv.at)

Box 1 - The 2001-2009 Fee Experiment in Austria

In 2000, the new coalition of the Austrian People's Party (Österreichische Volkspartei, ÖVP) and the Freedom Party of Austria (Freiheitliche Partei Österreichs, FPÖ) instituted a major change in the Austrian higher education landscape with the introduction of student tuition fees. Starting in 2001, students across all programs now had to pay €363 per semester. However, this policy was short-lived, ending in 2009 due to another shift in government. The government objective in introducing fees was to reduce drop-out rates and time to completion. There was also an additional goal to reduce public spending and, for two years, until 2003, the Federal Ministry of Finance received the tuition fees that students paid universities. Fachhochschulen have been allowed to charge fees since 2001; they use a mixed-funding system. Teaching colleges do not charge any fees.

The introduction of fees had a temporary negative impact on participation, as enrolment data and transition rates from secondary schools seem to indicate (see below for enrolment data). There was an initial drop in participation following the introduction of fees with a 9% reduction in transition rates and a 21% reduction in enrolment. While this could reflect non-active students, it appears that this drop was likely due to the shift in cost-sharing. The introduction of fees did not have a big impact on student behavior. Student surveys indicated that fees led students to be concerned by the duration of their studies, but not their choice of programs (Orr, Wespel, & Usher 2014).

Non-Monetary Equity Promotion Instruments

The Federal Government supports several actions at the national level:

- Affirmative action programs: According to the 2002 Universities Act (section 19, para. 6), every university must enact a plan for the advancement of women.
- Outreach programs
- Academic and career guidance and counseling (study choice support) but more is needed
- Gender and Diversity management in higher education is a thematic area of concern
- Orientation programs for first year students (hasn't reduced dropout rates, but does allow dropouts to be more conscientious in their choices.)
- Retention policies: Restricting access to courses (numbers) to reduce dropouts

Refugee Crisis

In the summer of 2015, the Austrian University Conference (Association of Rectors - UNIKO) introduced a program, "the MORE Initiative", designed to welcome and integrate refugees, including asylum seekers into higher education institutions. Twenty-one public universities participated. This free program had an individualized admissions procedure and offered orientation courses, a platform for academics and scientists to share their knowledge and expertise,

and various activities to welcome refugee students into Austrian society. Over the course of three academic years (2015/16-2017/18), 2,500 students took part in the program (Uniko, n.d.).

3.2.4 Equity Promotion Policies at the Institutional Level

Most universities in Austria now have a mandate for promoting diversity and gender equity and have established a designated office or center within their institution to work on this. Gender equity is well defined by law and this is the area that universities have developed the most in terms of equity. Universities in Austria state their goals regarding equity policies in various forms that can include charters or plans.

Gender Equality in Universities

Because of a robust legislative framework regarding gender equity in higher education, Austrian universities have made significant headway in establishing and implementing equity policies. The Austrian University Act requires universities to make specific provisions for gender equality – both in stated missions and related actions. Performance agreements between the Ministry for Higher Education and universities require the latter to enhance women in leadership positions, support female academics, and develop a Plan for the Advancement of Women. It also requires them to set up administrative units to coordinate gender equality, women's advancement and research on gender.

As a result, universities implement a variety of measures to implement these gender policies. For example, the University of Vienna, the Vienna University of Technology and Universität Innsbruck all have dedicated gender units, charters or diversity plans, and support research on gender. Monitoring is also a part of these actions, and statistics on gender across the university positions are maintained. Some universities also include guidelines on gender specific language. The Academy of Fine Arts Vienna is the only Austrian university where women hold 50% of all staff, on all levels of management.

Other Equity Target Groups

While gender is the best-defined target groups in Austrian universities, some universities also ensure that policies are in place to support the participation and success of other groups. The predominant groups that are mentioned are students with disabilities, LGBTQ students, first generation students (or students from low socioeconomic background) and students with mental health issues. While some universities directly lead support efforts for these equity groups, the students' unions also seem to take a role in providing services for these equity groups during their studies. In May 2019, the University of Vienna expanded its equity plan to include other equity groups like persons with disabilities or chronic illness, and trans, inter, and non-binary people.

Fighting Discrimination

As part of the enacting the legislative framework, universities are also expected to establish a mechanism to address cases of discrimination. For example, at the Academy of Fine Arts Vienna, the Working Committee on Equal Treatment handles concerns and suspected cases of discrimination.

3.2.5 What Works: Impact of Equity Policies

There is not enough data on the socio-economic status of students beyond the secondary level to have a clear picture of the evolution of the socioeconomic distribution of students enrolled in Austrian higher education institutions. While the structural elements of the Austrian higher education system mean that most students can access public universities basically free of charge (or pretty cheaply for those who pay tuition), in addition to the different forms of financial aid available through grants, subsidies, and loans, potential disparities may be missed because of the lack of data on the experience of university as it relates to socioeconomic status. It is not enough to have general information about access and participation, it would be important to understand whether and how socioeconomic status impacts dropout rates and graduation rates.

A recent study commissioned by the European Commission sheds some lights on the structural impact of the admission system in place in Austria. It classified national systems into four groups based on the degree of selectivity in terms of access to higher education and the existence of streaming in secondary education. In the case of Type I systems, to which Austria belongs, the report found out that "...these systems do have the lowest relative participation rates by students from low social backgrounds. One might therefore say that while they are effective systems, they are only effective for those who have social advantages to begin with" (Orr *et al*, 2017, p.8).

Table 29 – Typology of European Admission Systems

Selection Streaming	(Nearly all) HEIs can select with additional criteria	HEIs cannot select with additional criteria (in normal circumstances)
At least one pathway through the school system does not lead to a qualification enabling higher education entry (to some part of the system)	Type 4: Double selection Czech Republic, Iceland, Montenegro Norway, Romania, Serbia, Slovakia, Spain, United Kingdom	Type 1: Selection by schools Austria, Belgium, Denmark, Germany, Hungary, Italy, Luxembourg, Netherlands, Poland, Slovenia
In general, all pathways may lead to higher education entry (in some part of the system)	Type 2: Selection by HEIs Bulgaria, Croatia, Cyprus, Estonia, Finland, Portugal, Lithuania, Latvia	Type 3: Least selection Albania, France, Greece, Ireland, the former Yugoslav Republic of Macedonia, Malta, Sweden, Turkey

Source: Orr et al., 2017

The Agency for Quality Assurance and Accreditation Austria, established in 2012, is responsible for quality assurance. But it does not explicitly take the equity policy and results of individual institutions into consideration.

Strategic Gender Equality Objectives are formalized in the Universities' Performance Agreements. The Austrian Higher Education Data Agency collects more data on gender than any other equity group. Among other things, the government collects data from higher education institutions on participation and success based on gender. It also monitors the composition of staff, the gender pay gap, career trajectories, and the leaky pipeline.

A gender monitoring system is being put in place to monitor the evolving situation at the institutional level (Federal Ministry of Science, Research and Economy, n.d.). Generally speaking, official Higher Education data do not sufficiently disaggregate by equity group to provide sufficient information on the equity status of certain groups. Gender is the main target group that is considered in the data collection.

While the Austrian universities did a lot to integrate refugee students, the program was not very effective. Out of the 2,500 students supported by the MORE initiative, only 68 managed to transfer into a degree program (UNIKO, n.d.). The main reason for the meagre results is that the Initiative helped on the academic front but did not address the social challenges faced by refugee students, such as lack of residence or administrative difficulties.

3.2.6 Summary Analysis of Equity in Austria: Strengths, Challenges and Suggestions

Strengths

- Austria has a high enrollment rate, which can largely be attributed to the open-access nature of the higher education system and the absence of financial barriers.
- Gender parity is strong, especially in the public universities and universities of applied science (*Fachhochschulen*). Progress has also been achieved in STEM programs.
- Data collection and monitoring are well established for gender.
- Institutions can be quick to adapt and respond to emergency situations, as they demonstrated with the recent refugee crisis.

Challenges

- There are serious limitations in terms of collecting data on equity groups beyond gender. In particular, no data are directly available on dimensions such as socio-economic status, ethnicity, race, religion, etc. Attempts are made to work around this through euphemistic categories (students from a migration background, parental educational level) but they do not always yield robust information.
- Notwithstanding the lack of data on the socio-economic status of the students, it is safe to assume that the low graduation rates are likely to affect disproportionally first-generation students coming from households with less cultural capital.

Suggestions

- It would be important to collect data on the socioeconomic origin of students more systematically in terms of both access and success.
- On the premise that success is as important as access, more work needs to be done to improve the retention of students of all equity groups with adequate interventions (innovative pedagogies, mentoring and tutoring, etc.).

- Reducing the number of students in classes and study groups could help improve the quality of the education experience and, in turn, improve throughput and completion.
- Programs to help refugee students access universities more easily should take not only academic factors into consideration but also seek to remove the social and administrative barriers faced by refugees.

3.3 The Case of Colombia

3.3.1 Overview of the Higher Education System

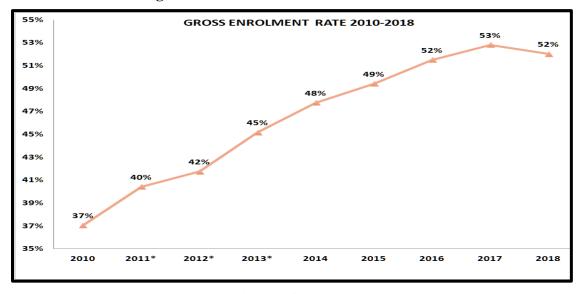
The Colombian higher education system has grown tremendously in the past two decades. Table 30 shows how its gross enrollment rate is now above the LAC average, after passing large countries such as Brazil and Mexico. Figure 8 reveals a steady growth in the enrollment rate during this decade.

Table 30 – Gross Enrollment Rate of Colombia and Comparator Countries (2010-2016)

Countries	2010	2016
Argentina	73.9	89.1**
Brazil	46.8*	50.5**
Chile	68.8	91.5
Colombia	39.4	60.4
Costa Rica	50.0*	55.6
Mexico	26.3	38.2
LAC Average	40.6	50.6

Source: The World Bank – Education Statistics *Data for 2013 **Data for 2016

Figure 8 – Gross Enrolment Rate 2010-2018



Source: Ministry of Education (MEN)

Today, 298 higher education institutions (HEI) operate in the country: 81 are public and 280 are private institutions (Table 31).

Table 31 – Number of Higher Education Institutions in 2018

Type of Institution	Public	Private	Total
University	33	53	86
Institution University	31	103	134
Institution Technological	11	37	48
Institution Technical	9	21	30
Total	84*	214	298

Source: MEN. Sistema de Aseguramiento de la Calidad de Educación Superior - SACES 2018

Table 32 presents the distribution of enrollment by status of institutions, learning modality, and gender. It shows that Colombian students are distributed evenly between public and private institutions and that virtual / online education is gaining slowly, representing a fifth of all students. Finally, female students have become the majority.

Table 32 – Enrolment by Legal Status, Learning Modality, and Gender

	2010	2018
Total Enrollment	1,674,021	2,408,041
Enrollment Rate	37,05	52.01%
Enrolled in Public Institutions	55.4%	50.2%
On-Campus Students	89.0%	80.5%
Women	51.5%	53.0%

Source: MEN

3.3.2 Equity Snapshot

The important increase in higher education enrolment during the last two decades has also resulted in a more equitable distribution of access to higher education. Table 33 shows the net enrollment rate by income quintile, comparing Colombia and other countries in the region. The disparity index shows that Colombia still has a long way to go to improve compared to Argentina and Chile, which have the best equity record in the region.

Table xxx – Net Enrollment Rate by Income Quintile for Selected LAC Countries (%, Latest Available Year)

Country	Q1	Q2	Q3	Q4	Q5	Disparity Index Q5 / Q1
Argentina (2017)	28.6	28.9	35.3	47.4	67.2	2.3
Brazil (2015)	6.2	10,1	17.6	28.9	56.4	9.1
Chile (2015)	36.5	40.9	41.1	49.2	69.3	1.9
Colombia (2016)	11.3	17.1	23.3	31.9	56.7	5.0
Costa Rica (2017)	6.6	14.4	20.0	28.1	60.3	9.1
Ecuador (2016)	14.0	17.8	22.5	27.1	50.2	3.6
Mexico (2016)	15.3	22.0	27.7	33.2	55.8	3.6
Peru (2016)	21.5	35.2	42.2	47.6	65.1	3.0

Source: SEDLAC (CEDLAS and World Bank), May 2018¹⁰

Even though all the higher education institutions are obligated to report to the Ministry of Education the distribution of enrollment by socioeconomic origin, the Ministry does not consolidate these data to produce a national report. Table 34 presents the evolution of these data from 2010 to 2018. The data reveal that students from lower socioeconomic groups tend to drop out more frequently. Significant progress was achieved for the poorest group but not for the others. In fact, the situation of group S3 deteriorated over the period.

Table 34 – Dropout Rate by Socioeconomic Strata

Socioeconomic Group	2010	2018
S1	15,0%	12.3%
S2	12.4%	12.4%
S3	10.5%	12.3%
S4	11.2%	11.0%
S5	7.9%	9.0%
S6	6.2%	6.2%

Source: MEN - SPADIES

National data on students from Indigenous groups and students with disability are not available.

64

_

¹⁰ http://www.cedlas.econo.unlp.edu.ar/wp/en/estadisticas/sedlac/estadisticas/

The geographical distribution of higher education institutions is a factor contributing to enrollment disparities. Table 35 shows the distribution by major region and the equivalent share of the overall population. The data clearly indicate a major imbalance, with Bogota the capital city accounting for a third of all enrollment, almost twice its population share.

Table 35 – Geographical Distribution of HEIs and Enrollment

Dogiona	HEIs		Enrolment		Share of
Regions	Total	%	Total	%	Population
Antioquia	52	17.5%	334,374	13.8%	14.0%
Bogota	115	38.6%	792,583	33.0%	17.2%
Valle del Cauca	39	13.1%	179,013	7.4%	9.9%
Remaining	92	30.8%	1,102,071	45.8%	58.9%

Source: MEN

Like many countries in the region, Colombia has achieved good gender balance in higher education (Figure 9). As a matter for fact, the lagging situation of males should be a matter of concern in Argentina, Brazil and Costa Rica.

60 48.4 47.5 50 42.7 40.6 39.1 40 31.031.5 29.3 29.5 28.3 30 25.3 25.5 18.8 17.2 20 10 0 **Argentina Brazil** Chile Costa Rica Mexico Peru Colombia ■Female ■ Male

Figure 9 – Enrollment Rate by Gender in Select LAC Countries (%)

Source: SEDLAC (CEDLAS and World Bank)

At the national level, the proportion of females seems to be greater in private higher education institutions, as illustrated by Table 36. The gap has grown between 2010 and 2018. Figure xxx shows the evolution of the enrollment rate for both men and women in Colombia in the past decade.

Table 36 – Share of Enrolment by Gender at National Level (2010 - 2018)

Conton	20	10	2018	
Sector	Male	Female	Male	Female
Public HEIs	49.97%	50.03%	50.77%	49.23%
Private HEIs	46.54%	53.46%	45.49%	56.51%
Total	48.44%	51.56%	47.12%	52.88%

Source: MEN

While gender parity is not an issue in terms of overall enrollment, there is room for progress in the STEM programs, where the proportion of women is about one-third. This is on par with comparator countries, except Argentina that has a higher share and Chile where the share is much lower than in Colombia (Table 37).

Table 37 – Percentage of STEM Graduates who are Female

Country	2010	2014	2017
Argentina	43.5	na	46.5*
Brazil	30.6	34.9	36.6
Chile	20.2	18.6	18.8
Colombia	n.a	34.2	34.1
Costa Rica	28.7	na	33.4
Mexico	33	31.2	31.3*

Source: World Bank Education Statistics
* Data from 2016

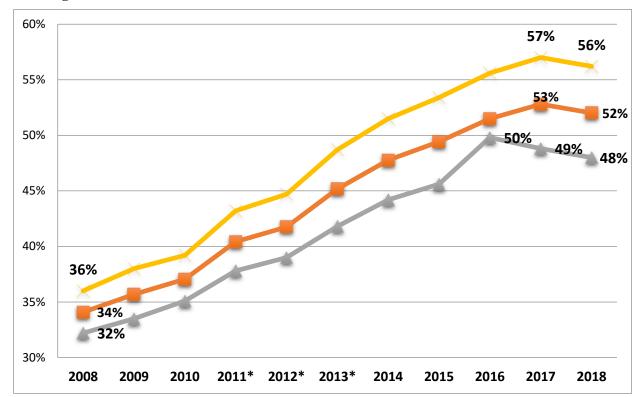


Figure 10 – Gross Enrollment Rate of Women and Men in Colombia (2008-2018)

Source: MEN

Table 38 shows that women are still under-represented in senior academic positions. Unlike what happens at the level of enrolment, the participation of the women in academic positions has been in average of only 36% in the period 2010-2018, whereas the participation of the men has been at 64%. The gap is even larger when it comes to leadership positions. Four-fifth of university rectors are men.

Table 38 – Gender Distribution by Academic Positions

Position	2010		2018		
Fosition	Female Male		Female	Male	
Academics	33.8%	66.2%	36.7%	63.3%	
University Rectors	na	na	20%	80%	

Source: MEN and Observatorio Colombiano de la Universidad

3.3.3 Government Equity Promotion Policies

The Ministry of National Education (MEN) is responsible for managing and overseeing every stage in the formation of human capital in Colombia. Within the MEN, the Vice-Ministry of Higher Education was established in 2003 to design and implement national policies for higher education and oversee the development of the sector. The National Higher Education Council

(CESU), established in 1992, is an advisory body of the Ministry of National Education. Its members are from the higher education community.

The National Intersectorial Commission for Higher Education Quality Assurance (CONACES), is a consultative institution of the Ministry advising on quality assurance issues, with a focus on authorizing new institutions and programs. CONACES also advises on quality improvement policies, on the recognition of foreign qualifications, and on the legislative framework for tertiary education. The National Accreditation Council (CNA), is another consultative institution of the Ministry, responsible mainly for institutional and program accreditation. The council consists solely of academics nominated by the CESU.

The Colombian Institute of Educational Credit and Technical Studies Abroad (ICETEX) aims to promote access and success in higher education and increase coverage by providing financial support to low income students. ICETEX, the first ever student loan agency in the world established in 1951, was set up initially to provide Colombian students with loans to pursue higher education abroad. However, its mission has evolved to focus principally on promoting equity for domestic students.

Since Colombia is a decentralized country, some of most developed regions with the greatest concentration of population have taken an important role in higher education, especially in ensuring equity in access and student success. An example of this is the existence of Sapiencia, the Higher Education Agency of Medellín, which supports the higher education system of the Municipality through the management of public policies and resources to promote the equitable participation of all groups in society. Bogota and Medellin both have a sub-secretary of higher education in charge of managing bridge programs between high school students and the city's main private and public universities in order to guarantee the articulation between these two levels.

Law 30 of 1992 is the most important official document defining the country's national higher education priorities. Other policy documents and papers have shaped the country's higher education policy, especially as it relates to equity in higher education. The Policy Guidelines for Inclusive Higher Education (2013) and Gender Approach and Identities (2014) are designed to enhance diversity and encourage respect for differences. By transcending the strictly academic and curricular aspects, these documents seek to promote inclusive education by examining the barriers to participation and learning. The following documents also have an equity focus:

- Law recognizing black communities living in the wasteland in rural areas along the rivers of the Pacific Rim (Law 70 of 1993 Article 38);
- Law in favor of rural women (Law 731 of 2002 Articles 16, 17);
- Law on Comprehensive Assistance and Reparation for Victims of Internal Armed Conflict (Law 1448 of 2011); and
- Law through which provisions are established to guarantee the full exercise of the rights of persons with disabilities (Statutory Law 1618 of 2013).

The current national development plan (Pact for Colombia, Pact for Equity" 2018-2022) contains the objective of promoting inclusive and quality higher education. As part of the plan, the Government intends to allocate additional resources to public universities, implement free higher education in public institutions, and guarantee the permanence and graduation of low-income students. The plan seeks to increase higher education from 53% to 60%.

Access to both public and private universities is determined by the results of the national tests (*Saber* 11) organized by the Colombian Evaluation Institute (ICFES) for all high school students. The only exceptions are the National University and the University of Antioquia, the country's top two public universities, which administer their own entrance examination. Table 39 shows the selectivity and absorption rates at both public and private higher education institutions. The data reveal that private institutions tend to be more selective overall, but that the absorption rates are higher at the public institutions.

Table 39 – Selectivity and Absorption 2010-2018

	Selectiv	vity Rate*	Absorpti	on Rate**
Sector	2010	2018	2010	2018
Public	40,0%	33,7%	84.0%	83.6%
Private	79,5%	79,1%	73.4%	77.8%
Total	56,6%	49,6%	77.7%	80.4%

Source: MEN

Notes: * Admitted / Candidates; ** Actually registered / Admitted

Financial Equity Promotion Instruments

Colombian public universities and non-university institutions have two principal funding sources to supplement the government's budgetary contribution: tuition fees and income generation from contracts and donations. Overall, the proportion of self-generated resources in Colombian public universities, including tuition fees and research contracts, amount to 45% of their total income (OECD, 2011).

Average annual fees at public universities are in the 650\$ range, while fees can amount to 6,500\$ a year at elite private universities. This would represent about 10% of per capita GDP for public universities and 100% for private universities.

Government expenditure on higher education is slightly below average in relation to comparator countries (Table 40).

Table 40 – Government Expenditure on Tertiary Education as % of GDP

Country	2010	2014	2017
Argentina	1.0	1.1	1.1
Brazil	0.9	1.1	1.3
Chile	0.9	1.2	1.4
Colombia	1.1	1.0	0.8
Costa Rica	1.2	1.5	1.8
Mexico	1.0	1.1	1.1

Source: The World Bank – Education Statistics

It is important to note that the distribution of public resources across universities is highly unequal. First of all, as mentioned earlier, the State does not transfer public resources to the technical and technological institutes, which enroll 23% of all undergraduate students. Second, the per-student allocation going to the various public universities is highly unequal for historical reasons. On a per-student basis, students enrolled in the National University, the best-endowed public university in the country, receive 17 times as much public subsidies as those enrolled in the poorest public university on a per-student basis.¹¹

The Colombian Government uses three main financing instruments to promote equity in higher education, which are all administered by ICETEX: (i) a subsidized student loan system to pay tuition fees in public or private universities, (ii) various scholarships programs, and (iii) grants to help needy students with their living expenditures. The scholarships and grants are called non-reimbursable loans.

Table 41 shows the evolution of the number of beneficiaries from 2010 to 2018. Between 2010 and 2010, the share of the total undergraduate population benefiting from an ICETEX loan has grown from 19% to 30%. This is an outstanding result. Few mortgage-type student loan systems in the world reach such a high proportion.

Table 41 – Evolution of Student Loan Beneficiaries (2010-2018)

Number of Beneficiaries	2010	2011	2012	2013	2014	2015	2016	2017	2018
New Beneficiaries	37,366	51,868	55,305	53,893	59,698	52,983	50,117	45,924	29,960
Total Beneficiaries	300,015	351,043	549,435	524,726	596,222	652,783	628,000	636,000	n.a.
Undergraduate Students	1,587,760	1,745,983	1,812,500	1,967,053	2,080,440	2,149,504	2,234,285	2,280,327	2,234,692
Share of Undergrads	18.9%	20.1%	30.3%	26.7%	28.7%	30.4%	28.1%	27.9%	n.a.

Source: ICETEX

It is however worrisome to see that ICETEX has reduced in recent years the number of loans going to students enrolled in technical and technological institutes, as demonstrated by the data shown in Table 42. Between 2010 and 2018, the proportion of beneficiaries enrolled in these institutes went down from 25% to a mere 2%.

 $^{^{11}\ \}underline{\text{https://www.universidad.edu.co/la-inequitativa-distribucion-de-recursos-entre-las-propias-universidads-publicas/}$

Table 42 – Distribution of ICETEX Loans by Type of Institution

Type of Institution	2010	2014	2018
University	78.6%	84.3%	97.7%
Technology Institute	16.0%	11.9%	2.0%
Technical Institute	5.4%	3.8%	0.3%

Source: ICETEX

ICETEX is in the process of migrating from a mortgage type to an income-contingent loan scheme, with technical assistance from Australia. This should help reduce the loan burden on graduates from the lowest socioeconomic groups.

In addition to student loans, ICETEX has managed several scholarship and grant programs on behalf of the Ministry of Education, the Ministry of Culture, Public Companies such as Ecopetrol, Departments and Municipalities, as well as the private sector. The main programs are as follows:

- The Black Community Scholarship Fund, established to support young people belonging to Afro-Colombian, Raizales and Palenqueras populations. It has granted scholarships to 20,886 students belonging to these ethnic groups between 2010 and 2019.
- The Álvaro Ulcué Chocué Fund has granted 15,286 scholarships to members of indigenous population groups between 2010 and 2019.
- The Victims of Conflict Fund targets students from displaced groups and victims of violence.

In 2015, a new Minister of Education introduced an innovative program called "Ser Pilo Paga" ("It pays to be a good student"), which targeted students from the lowest socioeconomic groups with excellent academic results. The beneficiaries received a generous scholarship covering both tuition fees at an accredited university of their choice, as well as their living expenses.

The "Ser Pilo Paga" program financed 37,505 students between 2015 and 2018, at which date the program was terminated. The program proved very controversial because of its high cost. Questions were raised about the negative impact on ICETEX, whose budgetary allocation decreased during the Ser Pilo Paga program. In 2018, ICETEX was able to grant less than 30,000 new loans compared to 60,000 in 2014, the year before Ser Pilo Paga started (Table 42). The public universities complained that 90% of the beneficiaries opted to go to high-end private universities. Finally, it is estimated that about 5% of the beneficiaries did not finish their studies and ended up with a high debt, as the program stipulated that beneficiaries would have to reimburse the full amount of the scholarship in case of failure.¹² Table 43 summarizes the number of

71

-

¹² https://www.universidad.edu.co/situacion-de-ex-pilos-paga-cronica-de-un-drama-anunciado/; https://www.universidad.edu.co/todas-las-politicas-en-ed-sup-de-gina-parody-se-frustraron-o-se-replantearon/

beneficiaries and the amounts spent for the various student aid programs. The amounts show that one student benefiting from a "Ser Pilo Paga" scholarship received an amount of government subsidies equivalent to what 20 ICETEX loan beneficiaries received together.

Table 43 – Panorama of Government Grants and Loans

Instrument	Target Group	Period	Number of Beneficiaries	Total Amount (Million Pesos)	Per Student Amount (Pesos)
Afro-Colombian Fund	Afro Colombian Students	2010-2019	20,886	228,605	10,945,131
Indigenous Fund	Indigenous population	2010-2019	15,286	116,111	7,595.185
Victims of Conflict Fund	Displaced / Demobilized Groups	2013-2019	6,118	87,960	14,383.785
"Ser Pilo Paga" Fund	SES 1, 2, 3 with excellent academic results	2015-2018	37,505	2,287,958	61,005,199
Generation E Equality Fund.	SES 1, 2, 3	2019	29,754	27,728	931,908
Generation E Excellence Fund	SES 1, 2, 3 with excellent academic results	2019	3,358	32,495	9,678,380
ICETEX Loans (new)	SES 1, 2, 3	2010-2018	437,114	1,393,872	3,188,780

Source: ICETEX

Non-Monetary Equity Promotion Policies

To complement its extensive student aid policy in favor of needy students, the Colombian government also promotes several non-monetary programs to promote equity. The principal programs are (i) outreach, (ii) CERES, and (iiii) integrated support model.

• Outreach and bridge program. The Ministry designed a national outreach and bridging program to improve the articulation of upper secondary schools with higher education institutions. This program, which enlists the help of regional and municipal authorities, is a pedagogical and management process that implies joint actions between high schools and higher education institutions to facilitate the transition of the students between these two levels.

72

- The Regional Centers for Higher Education (CERES) is a national program involving partnerships among higher education institutions, local authorities and employers. They join efforts and resources to offer quality programs in regions where the supply of higher education is insufficient or nonexistent. These centers aim to bring quality education to marginalized communities, in order to generate new opportunities for social and economic development. There are 141 such centers around the country offering 748 academic programs and enrolling around 28,761 students.
- Integrated Support Model (Modelo de Atención Integral al Estudiante). Icetex and the Ministry of Education are responsible for this policy. The purpose is to increase the chances of success of vulnerable students by focusing on three aspects of student life: financial (access and permanence), social (insertion into the academic environment, support for personal life and adaptation to the university environment) and academic (personalized curriculum, information about student regulations, academic leveling and reinforcement tutoring).

In practice, however, most initiatives aiming at improving access and retention, besides financial aid, come from the universities themselves, as discussed in the next section.

3.3.4 Equity Promotion Policies at the Institutional Level

Six Colombian universities collaborated with this study and provided relevant information about the policies and measures that they have put in place to promote equity. ¹³ In addition to their strong commitment to equity, these universities were selected based on several considerations: (i) they are located in different regions of the country, (ii) they represent both the public and the private sector, (iii) they serve different populations, (iv) they have face-to-face, virtual and distance education modalities, and (v) they are at different stages in the quality accreditation process.

Table 44 provides an overview of the extent of their equity policies. All six universities have defined equity targets and formulated policies and measures to achieve them.

__

¹³ The author is extremely grateful to the leaders and staff of EAFIT, Universidad de Antioquia, Universidad Autónoma del Occidente, Universidad del Valle, Universidad Los Andes, and Universidad UNIMINUTO for their generosity in sharing information about their equity programs and lessons learned.

Table 44 – Comprehensiveness of Equity Promotion Policies

Dimensions	Antioquia University	Valle University	UniMinuto	EAFIT	Los Andes University	UAO
Standalone Equity Policy Document			V			
Targeted Specific Equity Policy	1	1	1	1	1	1
Equity Targets	1	√	V	1	√	√
Dedicated Equity Department	1	√	1			
Comprehensive Equity Monitoring						

Source: Survey of universities

Table 45 shows the range of financing instruments that the universities use to complement the national policies of the Colombian government in this area. All universities, public and private, provide scholarships to support low-income students. The private universities have their own student loan to complement government financial aid. Uniminuto deliberately targets students from under-represented groups, offering low tuition and its own student loans through a cooperative microfinancing program.

Table 45 – Financing Instruments in Place

Equity Policy Instrument	Antioquia University	Valle University	UniMinuto	EAFIT	Los Andes University	UAO
Low Tuition			1			
Targeted Free Tuition	1	1	1			
Grants & Scholarships	√	1	1	1	1	1
Student Loans			1		√	1

Source: Survey of universities

All six universities are very active in the area of retention, as the dropout phenomenon is one of the biggest challenges faced by Colombian universities, because of financial constraints and uneven quality of secondary education, especially in the public high schools (OECD, 2016). Table 46 illustrates the various interventions they use to improve student success.

Table 46 – Non-Monetary Instruments in Place

Equity Policy Instrument	Antioquia University	Valle University	UniMinuto	EAFIT	Los Andes University	UAO
Outreach / Bridge	√	√	√			√
Preferential Admission	1	1	1			
Regional Campuses	1	1	1			
Retention	1	1	1	√	1	1

Source: Survey of universities

Table 47 presents the evolution of gender participation in the surveyed universities. It shows that private universities tend to have a slightly lower proportion of women than public ones. This may signal that the cost of tuition fees could be a stronger deterrent for girls than for boys.

Table 47 – Share of Enrolment by Gender at Institutional Level (2010 - 2018)

Nome of University	20	10	2018		
Name of University	Male	Female	Male	Female	
Universidad de Antioquia (public)	48.6%	51.4%	49.2%	50.8%	
Universidad del Valle (public)	48.1%	51.9%	51.5%	48.5%	
EAFIT University (private)	52.3%	47.7%	57.1%	42.9%	
Uniminuto (private)	46.6%	53.4%	28.5%	71.5%	
Universidad Autónoma de Cali (private)	55.1%	44.9%	55.5%	44.5%	
Universidad Los Andes (private)	57.1%	42.9%	54.8%	45.2%	

Source: Survey of universities

Each of the six universities surveyed has introduced a wide range of measures to welcome more students from under-represented groups and improve their chances of graduating. The following paragraphs highlight one example of innovative equity program from each university.

Los Andes University: Quiero Estudiar ("I want to study")

In 2006, Los Andes University implemented "I want to study" to provide financial support to thousands of academically talented young people who want access to quality higher education, but have limited financial resources. The program targets beneficiaries who belong mainly to households with incomes between 2 and 3 times the current legal minimum wage. The Institutional Development Plan (PDI) of the University gave priority to this effort, which made Los Andes

University a pioneer of targeted funding in the country. Between 2006 and 2009, this program enabled the admission to Los Andes of 146 academically distinguished young people with limited economic resources. In 2009, the first beneficiaries of this program graduated.

The program covers up to 95% of tuition throughout their studies. Upon graduation, the student agrees to return 20% of his income for twice as long as tuition was paid; The resources contributed by the graduates will be put towards supporting later cohorts. In 2019, there were 8,744 donors, 1,915 beneficiaries, 736 graduates. 14.2% of QE beneficiaries have graduated with honors, (22 Summa Cum Laude students, 7 Magna Cum Laude and 54 Cum Laude).

Valle University: ASES Program (Comprehensive Student Support and Monitoring)

The ASES program is a strategy designed by the Universidad del Valle to promote the adaptation to university life of two groups of students. The first one includes low-income students who enter under the Ser Pilo Paga program. The second one is made of students from displaced groups, Afro-Colombian students, and Indigenous students who benefit from special admission conditions. ASES includes the monitoring of student social and academic trajectories, to enhance the development of skills, knowledge, attitudes and behaviors in accordance with the requirements of university academic programs.

The program has a socio-educational component that supports students and monitors possible dropout signs. To do this, socio-educational coaches support five to ten students within the same program, share experiences, and keep a record of students' issues. ASES has supported 367 Ser Pilo Paga Program students, 523 students in exceptional conditions, and 23 students who have sought socio-educational support on their own.

In 2019, the university conducted a study on the prevention of dropouts to evaluate the impact of ASES on student academic performance, using the Propensity Score Matching methodology. This will provide information to guide university policy and analyze the role of academic performance in relation to student dropout. It found that, from the first year of intervention, the academic performance of ASES students was higher than non-ASES students.

Antioquia University: "I Can Do It" (Soy Capaz - Education and Equity for Students with Disability).

The Antioquia University "I Can Do It" initiative is an example of inclusive higher education, based on rights, equity, diversity, and difference, to counter the increasing social exclusion in the Colombian higher education system. This approach unites national and university policies around human rights and a conception of equity that recognizes student diversity. The policy focuses on the access, retention and graduation of students with disabilities, through tailored support and training strategies. The program combines the efforts of academic coordinators, university welfare officers, students with and without disabilities. The government recognized Antioquia University as the most inclusive university in 2019.

Autonomous University of the Occident: Cecilia Montalvo de Moreno Program

The Pilos loans (Cecilia Montalvo de Moreno program) is a long-term trust fund that supports students based on academic performance to raise their graduation chances (Figure 11). This program informs, guides and supports students with good academic standing but who face economic difficulties, lending them 50% or 25% of the cost of the semester. Students can work to pay off the debt. The program strengthens the students' academic performance and professional skills.

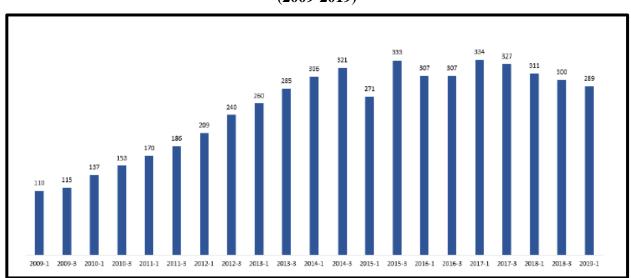


Figure 11. Number of students with a PILOS Loan - Cecilia Montalvo de Moreno Program (2009-2019)

EAFIT University: Scholarships for Agricultural Engineering

The creation of the Philanthropy Center at EAFIT University has facilitated the development of new partnerships to promote inclusion, equity, and provide opportunities for people who do not have the resources to access a quality higher education institution. This is the case with EAFIT Founders of Agricultural Engineering Scholarships.

This endeavor brings together Grupo Bios (a leading business group of the Colombian agribusiness sector) and the Aurelio Llano Posada, Bancolombia, Medellín and Sofía Pérez de Soto Foundations, benefiting each year 35 students from rural areas of eight departments of the country, from strata 1, 2 and 3. Through this new undergraduate degree, the students will be able to acquire the training and knowledge necessary to transform their realities and those of their regions.

In first year of the initiative, the Foundation for Agricultural Engineering Scholarships supported 15 young people from remote municipalities, who started studying Agricultural Engineering with a monthly stipend to cover living expenses such as housing, transportation, food and field trips.

Uniminuto: Integrated Focus Model (Modelo de Atención Ingreal al Estudiante)

Uniminuto has put in place a special programme of academic support dedicated to at-risk students. Initially, the programme targeted first-year students because of their higher propensity of dropping out. However, in recent years, the first-year academic support programme evolved into a more comprehensive approach called the Integrated Focus Model (IFM – Modelo de Atención Integral al Estudiante in Spanish), which operates during the entire duration of studies.

The comprehensive academic support model offers a wider range of interventions to accompany at-risk students and students in difficulty and follow them throughout the course of their studies, from the time they apply until after graduation.

The Integrated Focus Model 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:

- academic counselling;
- financial support for temporary difficulties;
- psychological counselling;
- a life project course, and
- remedial courses.

Financial support can take two forms: loans from Uniminuto's own funding cooperative; and scholarships from Uniminuto for students experiencing difficult economic situations.

The Deputy Vice-Chancellor in charge of 'academic welfare' oversees the implementation of the Integrated Focus Model. Throughout the Uniminuto university system, each faculty or school has a dedicated person responsible for coordinating the relevant interventions under the Model, collaborating closely with the central units responsible for organising the interventions. The Integrated Focus Model is carefully adjusted to the specific needs and capacities of each campus. In 2014, Uniminuto started to apply the integrated focus model to its Virtual Education Department, relying mainly on electronic messages, communications through the social media, and online counselling.

The main indicators used to monitor the Integrated Focus Model are the dropout and completion rates. Uniminuto was able to document clear but slow progress as a result of the Integrated Focus Model. At the end of the first semester of academic year 2010, the dropout rate for women and men was respectively 18.98% and 26.30%; for the first semester of academic year 2018, it had gone down to 8.62% and 11.17%. respectively.

The evaluation carried out in 2015 by the International Finance Corporation found that Uniminuto achieved the objective of offering affordable access to higher education to low-income individuals. Using strata as a proxy for the socioeconomic level of individuals, it found that: 63 percent of male and female students at enrollment lived in areas of 0, 1 or 2 strata (the poorest levels). In addition, about 56 percent of Uniminuto graduates were living below the 200 percent national poverty line at enrollment. Another important figure is the high proportion of women enrolled in Uniminuto: about 57 percent of the students were women and generally single.

In summary, the study found that Uniminuto offers vulnerable populations and people at the base of the pyramid access to tertiary education. The study also found that Uniminuto provides positive influence on the quality of life of its graduates, generating a positive impact on their social and economic mobility. Overall, receiving an education from Uniminuto has a positive impact on the quality of life and well-being of its graduates, and it improves their socioeconomic status. For example, the probability of living below the poverty line drops significantly for Uniminuto graduates from all programs (professional, technical, technological), compared with those who had not completed their programs. Uniminuto graduates find their first job about five months earlier than graduates from other TEI and dropouts. There were no significant income differences between Uniminuto graduates those from other HEI.

3.3.5 What Works: Impact of Equity Policies

Several indicators point to a general improvement in the equity profile of the Colombian higher education system in recent years. First of all, MEN statistics indicate that the transition rate from secondary to higher education has steadily increased. For example, between 2015 and 2017, it went up from 37.4% to 42.7%. Based on the survey conducted, it would appear that the main

factors explaining this progress would be better quality secondary education and effective academic counseling to inform and motivate high school graduates.

Second, the analysis of disparities by income quintiles reveal progress over time in Colombia at a more rapid pace than the regional comparators (Table 48).

Table 48 – Evolution of the Disparity Index (Q5/Q1) for Colombia and Comparators (2010-2016)

Country	2010	2016
Argentina	3.3	2.3*
Brazil	11.4	9.1
Chile	3.0	1.9
Colombia	8.2	5.0
Costa Rica	12.6	9.1*
Ecuador	3.6	3.6
Mexico	5.2	3.6
Peru	4.7	3.0

Source: SEDLAC (CEDLAS and World Bank); *2017

In the absence of rigorous impact evaluations, it is hard to identify with precision which interventions have worked best and in which way. However, a number of evaluation reports are available to draw some conclusions on the effects of government policies and measures at the institutional level.

The first observation has to do with the crucial role played over the years by ICETEX, which has developed an effective targeting mechanism aligned with its equity promotion mission. Figure 12 clearly demonstrates that the student loans actually go to the neediest beneficiaries. The proportion of beneficiaries from the lowest socioeconomic group almost doubled between 2010 and 2018, from 26 to 40% of all ICETEX beneficiaries.

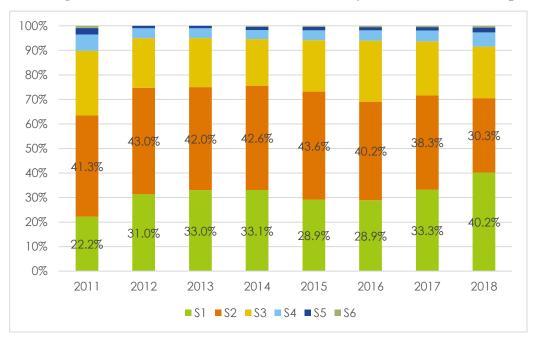


Figure 12 – Distribution of ICETEX Loans by Socioeconomic Groups

Source: ICETEX

A 2010 evaluation of ICETEX found that the student loan agency was targeting its student loans well, with an adequate focus on the poorest students (Econometria, 2010). Overall, it contributed to a significant increase in access to higher education between 2003 and 2009 (from 31% to 42%). Furthermore, students who benefit from an ICETEX loan are 22% less likely to drop out than the general student population. At the same time, the loan beneficiaries have better grades and a higher graduation rates than the other students. The pass rate is 15% higher in public universities and 9% higher in private higher education institutions. A 2008 evaluation had shown similar results, including a faster time to completion for student loan holders compared to non-beneficiaries (CEDE, 2008).

A 2013 evaluation of the regional centers program (CERES) found very positive results (Econometria, 2013). In terms of access, 73% of the Regional Centers (CERES) were located in municipalities that did not have any higher education provider previously and enrolled a majority of students from the poorest households. The quality of programs, measured by the ICFES tests, was equivalent to the national average. The salaries received by CERES graduates were 7.6% lower than the national average, which is understandable considering the lack of economic opportunities in the remote areas where the CERES were established by the very nature of the program.

A 2017 evaluation of the Ser Pilo Paga program, using a regression discontinuity analysis, concluded that beneficiaries had a 32% higher probability of accessing higher education than non-beneficiaries in 2014 and 26% higher in 2015 (CEDE, 2017). The dropout rate was 6% lower during the first term of the first year of studies.

Finally, it is important to recognize that individual universities have also been successful in targeting and attracting growing numbers of students from disadvantaged groups. Table 49, which shows the distribution of enrollment by SES, clearly demonstrates that all six universities surveyed

managed to increase the share of SES 1 students in a significant manner. This indicates that the combination of national student aid and institutional equity policies are having a positive impact. Comparing with the overall distribution by SES allows to see the degree of alignment of each university with society as large, and progress from 2010 to 2018.

Table 49 – Distribution of Enrollment by Socioeconomic Groups (%)

Universities	2010				2010 2018							
Offiversities	SES 1	SES 2	SES 3	SES 4	SES 5	SES 6	SES 1	SES 2	SES 3	SES 4	SES 5	SES 6
Antioquia University	11.9	42.5	38.5	5.5	1.4	0.2	13.9	42.0	36.6	5.6	1.6	0.3
Valle University	16.1	37.7	38.7	5.0	2.1	0.3	24.8	35.8	20.6	3.5	1.5	0.2
EAFIT	0.7	5.4	16.4	19.4	28.3	29.8	5.3	12.9	21.5	20.0	28.4	12.0
UniMinuto	12.0	52.4	33.6	1.8	0.2	0.0	19.0	54.3	24.4	2.0	0.3	0.1
UAO	5.1	16.0	32.7	16.5	12.5	2.4	7.9	22.5	35.2	19.4	12.6	2.3
Los Andes University*	0.0	4.0	17.0	28.0	23.0	28.0	3.0	8.0	18.0	28.0	21.0	22.0
Overall Population	17.0	36.0	31.0	12.0	3.0	1.0	15.9	28.9	34.4	11.0	7.1	2.7

Source: Survey of universities *2014 instead of 2010

Similarly, a few of them (EAFIT, Uniminuto, UAO) have achieved very positive results in reducing dropout rates for the poorest students, as demonstrated by Table 50.

Table 50 - Dropout Rates by Socioeconomic Groups (%)

Universities		2010-11						-		2018-1	9	
	SES 1	SES 2	SES 3	SES 4	SES 5	SES 6	SES 1	SES 2	SES 3	SES 4	SES 5	SES 6
Antioquia University	11%	8.6%	9%	17.3%	16.5%	16.7%	11.3%	10.4%	9.2%	7.1%	6.9%	5.8%
Valle University	9.3%	10%	10%	6.1%	12.7%	0%	12.8%	12.8%	14.7%	17.7%	6.1%	12.2%
EAFIT	19.2%	16%	14.8%	16.6%	12.9%	10%	12.3%	12.1%	10.2%	12.8%	8.6%	8.6%
UniMinuto	17,8%	8.4%	4.6%	5.3%	8%	7%	12.2%	10.8%	12.6%	8.5%	6.9%	3.2%
UAO	32.1%	22.4%	19.7%	28%	33%	0%	10.3%	9.5%	9.9%	11.4%	7.9%	12.2%
Los Andes University	7.1%	15.1%	8.3%	10.7%	5.60%	4.2%	9.2%	3.6%	7.7%	9.4%	5.4%	5.9%
Total Country	15%	12%	10%	11.2%	7.9%	6.1%	12.2%	12.4%	12.3%	11%	9%	6.2%

Source: SPADIES

This progress also confirms the importance of multi-pronged strategies to attract and retain low-income students. The only rigorous impact evaluation available for Colombia, which looked at

the effects of career information sessions on the transition rates of disadvantaged high school students, did not find any positive results (Bonilla, Bottan, & Ham, 2017).

3.3.6 Summary Analysis of Equity in Colombia: Strengths, Challenges and Suggestions

Strengths

- Colombia has achieved an impressive expansion of enrolment in the past two decades, with higher participation of low-income students and minorities. Increased presence of public and private universities in the regions, through face-to-face, distance and virtual programs has helped substantially.
- ICETEX, the first ever student loan agency in the world, has been the principal equity promotion instrument at the national level, effectively helping to increase access and reduce dropouts through subsidized loans, subsidies for living expenses, and targeted scholarships.
- The Ministry of Education has put in place a comprehensive and innovative MIS (SPADIES), with a wealth of information on the characteristics of students in the system, that helps higher education institutions monitor dropout levels, identify the contributing factors, and design appropriate strategies to improve retention.
- The leading public universities have strategies and structures dedicated to equity promotion interventions through financial aid and non-monetary instruments. Some of the private universities have also used government incentives (loans, scholarships) to undertake substantial equity-related activities and implement retention programs in support of vulnerable students.
- The Colombian government has included new equity target groups to recognize victims of violence, displaced population groups and gender diversity, among others.
- Decentralized public agencies at the level of departments and municipalities have complemented the equity work of the national government to improve access and success of students from vulnerable groups.

Challenges

- Public resources available for equity promotion programs are largely insufficient. In addition, budgetary transfers to public higher education institutions are not distributed according to any rational criterion nor do they encourage equity.
- Colombia has been characterized by a lack of continuity in equity policies from one government to the next, often resulting in new programs that have undermined the level of resources going to ICETEX and diminished the credibility of government equity programs.
- Colombia does not have a unified definition of low-income students. The existence of different scales has made it difficult to target the loans and maintenance grants provided by ICETEX. Another complication to reach vulnerable students is the fact that minority students (Indigenous, disability) are identified on the basis of self-reporting.
- A large share of the academic difficulties faced by students from under-represented groups at the higher education level are due to the poor quality of secondary education.
- The technical and technological institutions, where many low-income students enroll, do not receive budgetary support from the national government.

Suggestions

- The government of Colombia needs to set aside more resources in support of ICETEX, fund the technical and technological institutes adequately, and introduce equity-linked criteria in the allocation of budgetary resources to all public higher education institutions.
- It is indispensable to maintain continuity in higher education policies overall and equity promotion policies in particular.
- Colombia must adopt a single definition of low-income students that can be applied across
 the board.
- Efforts to improve the quality of secondary education and reduce disparities among high schools across the countries must be sustained.
- Even though Colombia has a relatively well-developed information system for higher education, there is a need for more compatibility and connection between existing databases (SNIES, SPADIES), as well as consistency between the data produced by the universities and those published by the Ministry of Education.
- Higher education institutions must be encouraged to systematically monitor and evaluate their equity promotion initiatives.
- There is a need for an appropriate platform that would allow the Colombian higher education institutions to share good practices and lessons of experience about their equity promotion programs and measures.

3.4 The Case of South Africa

3.4.1 Overview of the Higher Education System

The South African higher education system has grown fast since the democratic transition, from 473,000 students in 1994 to over 2 million students today. Figure 13 shows that, after Botswana, South Africa has the highest gross enrollment rate on the continent. But its 20% enrollment rate is still less than half the OECD average (42%).

Comparators 2016 (%) 45.0 42.0 40.0 35.0 30.0 23.4 25.0 20.5 20.0 16.0 15.0 10.0 8.5 8.0 10.0 7.6 4.6 4.0 3.9 5.0 0.0

Figure 13 – Gross Enrollment Rates in Tertiary Education in South Africa and Comparators 2016 (%)

Source: World Bank Data Bank – Education Statistics

Table 51 presents the institutional and enrollment distribution of students in South Africa.

Table 51 – Distribution of Higher Education Enrollment by Main Segment (2015)

Sub-Sector	Institutions	Enrollment	% of Enrollment
Public Universities	25	647,300	32.4%
Open University (UNISA)	1	337,900	16.9%
TVET Colleges	50	737,900	37.0%
Community Colleges	9	25,000	1.3%
Private HEIs	123	247,000	12.4%
Total	208	1,995,100	100.0

Source: Department of Higher Education and Training

The numbers reveal a high level of diversification, with the traditional public universities representing no more than 32% of total enrollment.

The violent student protests associated with the "#feesmustfall" movement from 2015 to 2017 were a strong reminder of the unique paradox that has characterized the South African higher education system since the end of apartheid in 1994. On the one hand, the country's top universities are the African leaders in the entire continent in terms of advanced training and research output. On the other hand, the higher education system has remained one of the most segmented and unequal systems in Africa, in spite of continuous efforts by the successive democratic governments to expand access and eliminate disparities.

3.4.2 Equity Snapshot

Next to housing, there is no place more revealing of the deep legacy of apartheid than the university system. Even though the gross enrollment rate has increased from 17 to close to 21%, today, 25 years after the end of apartheid as a legal regime, still only 16 percent of black South Africans access higher education, compared to 55 percent of whites, in a country where the black population accounts for 80% of the whole society. Table 51 shows the evolution of the proportion of South Africans with a higher education degree by race between 2008 and 2017. Even though the situation of the black population has improved a little bit, the gap between blacks and whites has increased slightly, from 15.2 percentage points in 2008 to 16.9 in 2017.

Table 52 – Individuals with Degrees as % of Economically Active Age Group 15–64 (2008–2017)

Year	Blacks	Whites	Gap
2008	1.6%	16.8%	15.2
2017	3.2%	20.1%	16.9

Source: DHET (2019)

In many ways, there is a very close correspondence between the ethnic and socio-economic distribution of the South African population. Available data derived from household surveys and the 2011 Income and Expenditure Survey show the share of public subsidies in higher education received by various income groups, illustrating the extremely unequal distribution of public resources (Table 53). It is worrisome to observe that the distribution has become even more unequal between 2006 and 2011, with the proportion going to the richest decile increasing by almost 50% over the period.

Table 53 – Estimated Subsidy Share by Decile

Tubic 35 Lb	Estimated Subsidy Share by Deene				
Decile	2006	2011			
D1	0.4%	2.5%			
D2	1.1%	1.1%			
D3	1.7%	1.7%			
D4	2.1%	1.8%			
D5	3.5%	3.4%			
D6	5.7%	3.3%			
D7	9.1%	7.2%			
D8	13.7%	11.8%			
D9	28.8%	19.2%			
D10	33.9%	48.0%			
Total	100.0%	100.0%			

Source: van der Berg (2016)

Disparities are visible not only at the access point but also in terms of completion rates across equity groups. Dropout rates at various types of institutions are a good proxy to document this aspect, considering that black South African students tend to leave high school less well prepared than white students, and are therefore more likely to fail, repeat and/or abandon after entering higher education. Table 54 provides statistics about the dramatically poor internal efficiency in the public system, resulting in high dropout rates.

Table 54 – Graduation Rates in Various Programs in Public Institutions

Type of Program	Dropout Rate
Universities 3-year degrees	58.8%
Universities 4-year degrees	54.6%
TVET certificates	49.0%
TVET diplomas	33.3%
UNISA 3-year degrees	14.0%
UNISA 4-year degrees	16.1%
UNISA 3-year diplomas	4.6%

Source: Council of Higher Education (2016)

According to DHET statistics, 59% of white students complete their studies within 5 years, compared to only 40% of black students; only 24% of black students enrolled in three-year degrees graduate on time, compared to 43% for their white counterparts (DHET, 2018). As the 2013 White Paper explains, "cohort studies have shown that black students, particularly those from poor backgrounds, are still most affected by poor graduation and throughput rates" (DHET, 2013, p. 32). These disparities in both access and success reveal that the system has not progressed as fast as expected from an equity viewpoint.

... the education system continues to replicate the divisions of the past. The institutional landscape is still reminiscent of apartheid, with disadvantaged institutions, especially those in rural areas of the former bantustans, still disadvantaged in terms of infrastructure, teaching facilities and staffing. Black students at formerly whites-only institutions have often been victims of racism, and female students have been victims of patriarchal practices and sexual harassment. Poorer students have to fit in with systems that were designed for students from relatively privileged backgrounds. Opportunities in rural areas are far more limited than those in urban areas and informal settlements are also victims of underprovision (2013 White Paper, p. 1).

More substantial progress has been achieved in doctoral education, where the share of black students among doctoral graduates has risen from 21% in 2000 to 50% in 2015.

As in the rest of Africa, gender balance is not an issue anymore as far as higher education enrollment and graduation are concerned. In fact, girls outnumber boys, representing 58% of total enrollment. The gross enrollment rates for women are higher than for men across all race groups. The situation is less favorable when it comes to STEM programs, where the gender gap still exists. But the situation is still much better than most countries in the world, since the proportion of female students in Science and Technology programs reached 46.2% in 2016.

Women hit a glass ceiling, however, when they reach senior academic and leadership positions, as revealed by Table 55. While women are the majority at the lowest end of the academic career, female professors represent only 27% of the total number of professors. Out of 26 universities, only 4 women occupy the position of vice-chancellor (Naidu, 2018).

Table 55 – Proportion of Women in Academic Positions

Category	Percentage	
Junior Lecturer	56.6	
Lecturer	53.3	
Senior Lecturer	45.1	
Associate Professor	39.5	
Professor	27.5	
Vice-Chancellor	15.4	

Source: Naidu (2018)

Few statistics are available on higher education opportunities for students with a disability. Based on the Census, it is estimated that at least 5% of the population declares having a disability. A 2011 survey of universities found that students with a disability accounted for less than 1% of the total student population. At 0.4%, the proportion is even lower in the TVET colleges. These data suggest that this population group encounters serious difficulties in reaching the post-secondary stage. The government recognizes that the situation leaves much room for improvement. According to the 2013 White Paper prepared by the Ministry of Education, "the majority of disabled students continue to experience discrimination in term of access to post-school education and training opportunities, and the system as a whole has inadequate facilities and staff to cater for the needs of the disabled" (DHET, 2013).

3.4.3 Government Equity Promotion Policies

The rapid expansion of enrolments in universities and colleges, quality improvements in parts of the system, desegregation and the opening up of opportunities to black and woman students are unprecedented in our history.

2013 White Paper

The Department of Higher Education and Training, which used to be under the Ministry of Education but has recently been transferred to the Ministry of Higher Education, Science and Technology, designs and implement the country's policies for the higher education sector. It is supported in this mission by the Council on Higher Education (CHE), whose main responsibilities are to provide policy advice to the Ministry and to carry out the quality assurance function on behalf of the South African government for both the university and the college sub-sectors.

"Universities South Africa" is the professional association representing the interests of all public universities. Through its advocacy work, it seeks appropriate conditions of operation for all member universities, with a view to promoting a "more inclusive, responsive and equitable national system of higher education" that contributes effectively to national development.

In the absence of a stand-alone equity promotion strategy document, the 1997 Higher Education Act, the 2013 National Development Plan (NDP) and the 2013 Post-Secondary White Paper are the key official documents setting out the main development objectives for higher education in South Africa, the equity principles and the specific equity targets. The NDP, launched in 2013, aims to "eliminate poverty and reduce inequality by 2030". An objective set out in the NDP is that the public university participation rate should reach 30% by 2030. The National Plan for Higher Education, which had been formulated in 2001, was supposed to be updated in recent years. This has been delayed, however, after the introduction of the targeted tuition fee policy in 2018.

Even though South Africa does not have an agency dedicated to equity promotion in higher education, nor do the quality assurance criteria defined and enforced by the Council of Higher Education take equity elements into consideration, equity is at the heart of the higher education development strategy formulated by DHET. The first policy objective outlined in the 2013 White Paper is about social justice, seeking to develop "a post-school system that can assist in building a fair, equitable, non-racial, non-sexist and democratic South Africa". The government of South Africa is keen on improving access and success for "those groups whose race, gender or disability status had previously disadvantaged them". The government has also been committed since the end of apartheid to making education free for the poor "as resources become available".

To further its equity goals, the general policy followed by the Ministry has been to expand access to higher education opportunities and work towards improve the quality of existing institutions and programs, especially those enrolling black students predominantly. For this purpose, the government has established new institutions in traditionally under-served regions of the country. Besides the four additional universities set up in the past two decades, notably two comprehensive universities in Northern Cape and Mpumalanga, the plan is to have at least one TVET college or community college in every district of the country by 2030.

Policy measures to support students with disability should stem from the Integrated National Disability Strategy, which was put in place in 1997. However, the 2013 White Paper noted little progress in that domain.

Despite attempts to integrate disability into the broader policy arena, currently there is no national policy on disability to guide education and training institutions in the post-school domain. The management of disability in post-school education remains fragmented and separate to that of existing transformation and diversity programmes at the institutional level. Individual institutions determine unique ways in which to address disability, and resourcing is allocated within each institution according to their programmes. Levels of commitment toward people with disability vary considerably between institutions, as do the resources allocated to addressing disability issues. TVET colleges in particular lack the capacity, or even the policies, to cater for students and staff with disabilities (DHET, 2013, p. 46).

To complement the government's overall equity strategy for higher education, the Promotion of Equality and Prevention of Unfair Discrimination Act 4 of 2000 (the Equality Act) is the principal instrument to prevent and punish discriminatory policies in education in South Africa. The Act was accompanied by the establishment of a network of Equality Courts for the quick and effective resolution of discrimination disputes.

Generally speaking, the official policy documents about inclusion and equity promotion specifically identify the following three equity target groups:

- Black and colored students;
- Female students: and
- Students with disability.

It is interesting to note that, in the case of South Africa, the Government does not focus specifically on low-income students as an equity target group, on the assumption that there is close overlap between being a black student and coming from a low-income family.

The current equity policies include a number of financial policy instruments (no tuition, targeted free tuition, bursaries, student loans) and non-monetary instruments (distance education, outreach, flexible pathways, retention).

Financial Equity Promotion Instruments

Figure 14, which shows the evolution of public spending on higher education over the past decade and half, reveals that government subsidies have stagnated at 0.7% of GDP until 2014, with a slight increase until 2017, the year before the introduction of the Targeted Free Tuition policy.

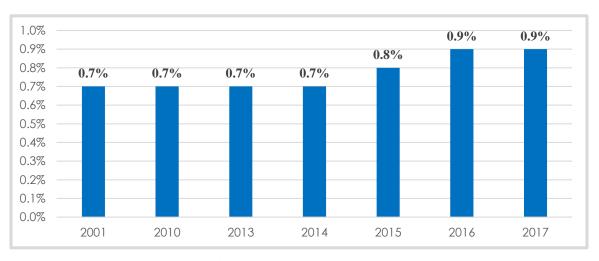


Figure 14 – Public Spending on Tertiary Education as a Proportion of GDP in South Africa (%)

Source: DHET and National Treasury

The public budget allocation going to the higher education system has in fact diminished in real terms over the past twenty years. Between 2000 and 2010, per-student funding decreased by 1.1% annually in real terms.

South Africa is the only country on the continent where public universities charge substantial tuition fees. Until the 2017 political crisis, tuition fees represented a significant proportion of resources in higher education, as illustrated by Figure 15. On average, the public budget contribution to South African universities' revenue was less than half (39%) and fees accounted for more than a third of total funding (35%). Furthermore, the government's share of the income of the public universities has gone down over the years, from 49% in 2000. At the same time, the share of tuition fees went up from 24% back in 2000.

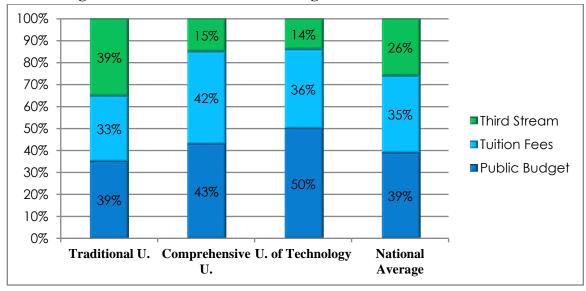


Figure 15 – Main Sources of Funding of South African Universities

Source: DHET

Until the recent policy change, the Government of South Africa had mitigated the impact of tuition fees through a system of scholarships and loans administered by NSFAS, the National Student Financial Aid Scheme, which took over from TEFSA, the Tertiary Education Fund of South Africa, in 1999. Over the past 25 years, NSFAS has financed more than 17 million students enrolled in a university or TVET college. In 2016, NSFAS funded more than 405,000 students with a total budget of about 15 billion Rand. During the decade between 2008 and 2017, the number of NSFAS beneficiaries doubled at universities and rose from 12,000 to 255,000 at TVET colleges. According to DHET statistics, close to 24% of all undergraduate university students and 35% of TVET college students were NSFAS beneficiaries by 2015.

A first change in funding policy came into effect in 2011 when the Government decided to exempt low-income students in TVET colleges from paying tuition fees. But the biggest reform happened after President Zuma announced in December 2017 that higher education would be free for all low-income students. The "targeted free tuition" program that was thus launched early 2018 in South Africa emulates similar programs recently decreed in Chile, Italy, Japan and the Philippines (Usher and Burroughs, 2018).

Today, South Africa relies on the following financial instruments to reduce disparities and promote equal opportunities: (i) tuition fee exemption for certain groups, (ii) need-based grants and student loans, (iii) a funding formula with built-in equity incentives, (and) earmarked grants for equity promotion.

• Targeted Free Tuition (TFT). Since December 2017, South African students from households with a combined income of less than the equivalent of 2,000\$ per month (350,000 Rands per year) are exempt from paying tuition fees. This corresponds approximately to the bottom 64% of those currently at university. Implementation of the new policy started in 2018 and is being phased in through 2022. However, low-income students (including black students) enrolled in private higher education institutions are not eligible for free tuition. This inequitable treatment is a paradox in a country that is working hard at eradicating the sequels of apartheid.

- Bursaries and Loans. As a result of the new funding policy announced in December 2017, the student loans provided previously by NSFAS have been progressively transformed into bursaries for all students eligible for the TFT. The bursaries are meant to cover all tuition costs, including an allowance for compulsory learning materials. Some of the students may also receive subsidies for food and lodging. During the transition years to implement the new funding system, the Government is giving priority to what it calls "first time entry students" into undergraduate studies at public higher education institutions.
- <u>Funding Formula</u>. Since 2004, South Africa has relied on a funding formula to allocation public resources to higher education institutions with equity-linked incentives built into the formula. The formula takes the proportion of black students enrolled into consideration to compensate for apartheid-time discrimination. However, this allocation mechanism has two drawbacks. First, the government is not strictly bound by the distribution formula, as resources allocated each year depend on the fiscal situation. Another limiting aspect is that only a small part of the budget allocation is determined by institutional performance and alignment with national policy objectives. For instance, the indicator relative to the number of undergraduate students completing their degrees accounted for only 12.5% of the funding formula in 2016-17.
- Earmarked Grants. The University Capacity Development Program (UCDP) launched in 2018 by DHET provides earmarked grants to support the work of the South African universities in various areas, including equity promotion. To be eligible, each university is required to develop a 3-year University Capacity Development Plan. For this purpose, the universities can use the funds to increase the diversification of the academic force by bringing on board more female and black academics in the context of the New Generation of Academics Programme (nGAP). The funds can also support retention efforts targeted to improve the academic results of under-represented students. The UCDP complements existing grants, such as the Foundation Provision Grant in support of first-year students and the Historically Disadvantaged Institutions Development Grant.

Non-Monetary Equity Promotion Instruments

South Africa relies on the following non-monetary instruments to reduce disparities and promote equal opportunities: (i) distance education, (ii) outreach and bridge programs, (iii) flexible pathways and transfers, and (iv) retention programs.

- <u>Distance Education</u>. South Africa has been a leader in distance education on the African continent. Established in 1946 as the country's main distance education university, the University of South Africa (UNISA) offers certificate, diploma and degree programs up to the doctoral level to close to 350,000 students. Today, UNISA is the largest open distance learning (ODL) institution in South Africa and Africa, and one of the world's top 30 megainstitutions. It produces the largest numbers of graduates among all South African universities every year.
- Outreach and Bridge Programs. Many South African universities conduct outreach activities to strengthen the pipeline of black / low income students, as well as attract more girls into STEM programs. These programs often include academic and career guidance to help high school students make informed decisions about their professional future and the related academic path.

- Flexible Pathways and Transfers. South Africa was a pioneer in establishing the first National Qualifications Framework (NQF) on the continent as early as 1996. One of the missions of the NQF is to facilitate mobility and progression across the various segments of the higher education system, including recognition of prior learning and articulation agreements.
- <u>Retention Programs</u>. Similar to the case of outreach, the South African universities have put many activities in place to monitor the progression of at-risk students and support them with various measures to address their financial, academic and psychological needs.

3.4.4 Equity Promotion Policies at the Institutional Level

"Our history in South Africa has a specific dimension and there is a moral and ethical obligation on leadership of universities in South Africa to ensure we do the right thing: that we allow people to feel that they belong... We need to create equitable university environments, rather than simply equal university environments. This means designing the physical, social and intellectual architecture of our universities to provide all students with an environment in which they feel at home and are able to reach their potential,"

Petersen, vice-chancellor of the University of the Free State

Since the end of apartheid, the university sector has worked towards increasing the participation of students from traditionally excluded groups. The challenge has been particularly big for the leading research universities, which were almost "white only". In the past decade, they have accelerated their efforts towards becoming inclusive institutions that are aligned with the rapid changes that South African society has undergone. Box 2 presents the transformation path followed by the University of Witwatersrand as an illustration of the kind of actions implemented by the top South African universities.

Box 2 – Transformation of the University of the Witwatersrand

Wits University recognizes the existence of social, economic, political and cultural imperatives that require both reflection and intervention to redress the inequalities and injustices imposed on all South Africans through apartheid. In 2015, after an extensive consultation process with the entire community, the University launched an eight-point transformation program and established the Transformation and Employment Equity Office to implement it, together with the Gender Equity Office and the Disability Rights Unit:

- Diversification of the academic staff with a focus on increasing the proportion of African and Coloured;
- Curriculum reform to achieve a better balance between local responsiveness and global competitiveness, including mandatory course for all students that speaks to South Africa's history, citizenship, civic service and a broader sense of ethics;
- Demographic balance in the student population, which is not only important from the perspective of addressing historical redress, but also for generating the soft skill sets intercultural personal skills, cultural tolerance across racial, ethnic and religious boundaries that are required for 21st century citizens and professionals who need to operate optimally in multicultural South African and global workplaces.
- Diversification of the student population living in the University's residences and promotion of a diverse and cosmopolitan residence life experience;
- Institutional culture where Black students do not feel marginalized and racism is eliminated;
- Proactive strategy on the naming of buildings and other sites to establish a positive institutional identity;
- Adoption of a language policy that combines keeping English as primary language of instruction while enabling staff and students to develop competence in at least one African language; and
- Insourcing of all outsourced administrative functions to avoid that staff be exploited by outside firms.

Besides the modernization of the curriculum and the introduction of innovative teaching methodologies, transformation means diversifying the demographic profile of Wits' student body and staff in terms of gender, race, class, ideology and nationality without compromising on academic merit, qualifications and standards. It also seeks to foster an inclusive institutional culture characterized by a nurturing and supportive environment necessary for the realization of academic excellence in all its dimensions.

Four years later, Wits University has achieved impressive progress. The share of Black students increased from 74% in 2013 to 84% in 2019, while the proportion

of Black academics went from 40% to 51% over the same period. Nine tenths of administrative staff are Black South Africans. 47% of the students are first generation students, a remarkable result for a selective research university. All outsourced services have been brought back to the University, with 1,500 persons working in these services within the University.

Source: Wits University Case Study

The South African universities have realized that improving access was not sufficient, and that a lot of efforts were needed to ensure that students from underserved groups would actually graduate (Dell, 2018). The University of Free State, for example, has complemented its University Access Program with a range of academic support services provided by its Centre for Teaching and Learning (CTL).

Two issues have proved quite divisive in recent years: affirmative action and language policy. With respect to affirmative action, the proponents of this approach, such as the former vice-chancellor of the University of Cape Town, argue that it is important to help disadvantaged students who graduate from high school less well-prepared academically because of "the legacy of different parental education, differences in cultural capital and the effects of racial stereotypes, which are all direct consequences of our apartheid past" (Price, 2013). Opponents of affirmative action argue that it is open to abuse because race is a self-reported characteristic rather than a legally defined one and that it may benefit Black students from wealthy households. However, a recent study of the effects of affirmative action at the University of Cape Town found that it was effective in improving the proportion of Black students and that it was well targeted, meaning that the beneficiaries came from a much lower socioeconomic status than the students displaced by affirmative action (Kerr *et al*, 2017).

Stellenbosch University has been at the center of controversies about language. While the leadership of the university has sought to introduce English as a medium of instruction, on par with Afrikaans, to attract a higher proportion of Black students, opponents to the policy sued the University to reverse the change. However, the South African Constitutional Court recently upheld the decision of the University to use English (Salomone, 2019).

3.4.5 What Works: Impact of Equity Policies

DHET is responsible for monitoring the impact of equity promotion programs and measures. Information about progress with respect to equity is usually available in the annual report produced by the Department. In addition, the 2013 White Paper had a more detailed assessment of the equity situation and advances in the previous decade, as does the recently published Post-School Education and Training Monitor document published in March 2019. The latest report found that, between 2010 and 2016, the proportion and enrollment rate of black students rose significantly (Table 56). The share of black academics increased also substantially.

Table 56 – Proportion of Black and Colored Students (2000-2016)

Category	2010	2016
% Black Students Enrolled in Public Universities	66.7	71.9
% Black Students Enrolled in TVET Colleges	83.9	92.1
% Black Students Enrolled in Private Institutions	60.8	67.1
% Black Academics	26.8	38.6

Source: DHET (2019)

The results in terms of academic success are less marked than those for access. The success rate of white students was 89.7% in 2016, compared to only 81.3% for black students.

Even though students with disability are one of the three equity target groups defined by the Government of South Africa, there is no system in place to collect information about their situation and no actual plan to improve the situation.

The overall prevalence of students with disabilities participating in the PSET sector is low. The system does not collect data on how (or how well) these students are accommodated, yet anecdotal evidence indicates that much can still be done to improve participation in the PSET sectors by people with disabilities (DHET, 2019, p. 24).

The only rigorous impact study of equity promotion policies in South Africa was carried out by researchers focusing on the effectiveness of loans in helping to eliminate the financial barriers faced by students. Applying a regression discontinuity design using the fact that students receive loans according to a credit score threshold, the evaluation found that loans covering tuition fees doubled enrollment rates of disadvantaged students in public universities (Gurgand, Lorenceau, & Mélonio, 2011). This confirms that financial barriers have been a major obstacle to access for black South African students. This finding is also consistent with the results of another rigorous impact evaluation in Chile, which concluded that the national loan program contributed to a 20 percentage points increase in enrollment for college-bound students in the lowest-income quintile (Solis, 2013).

Available information suggests a number of observations relative to the impact of equity promotion policies in South Africa. Firstly, as demonstrated by the statistics showing great progress on several fronts, the multi-faceted approach adopted by the democratic government and its steady implementation in the past two decades have borne their fruits. Providing scholarships and loans to students from under-represented groups, expanding the network of public higher education institutions throughout the country, offering various institutional forms to increase access opportunities, and providing incentives to universities to attract and support black students have translated into tangible results to reduce disparities in terms of access and, to a lesser extent,

success. Universities, in turn, have been responsive with their efforts to enroll a more diverse body of students in professional programmes (such as medicine, engineering finance) and in postgraduate studies, two areas in which historically disadvantaged students were largely underrepresented in the past. In addition, the New Generation of Academics Programme (nGAP) has enabled universities to recruit new academics into permanent positions and support them through a six-year professional development program.

The second observation is that institutional differentiation in a resource-constrained environment may fuel social segregation. Notwithstanding the substantial progress reached in raising the presence of black students in the university sub-sector, including in the top research universities, a large share of black students has ended up in the TVET colleges and the historically black universities, where quality is subpar for lack of adequate human and physical resources. As the Hehe Commission of Inquiry on Higher Education observed, "the CET and TVET sectors particularly need attention as they are severely underfunded, and cannot perform at their current funding levels" (Hehe Commission, 2017, p. 544). Between 2010 and 2015, average real expenditure per full-time equivalent TVET student dropped by 40%, whereas the number of TVET students grew from 359,000 to 738,000 (Figure 16).

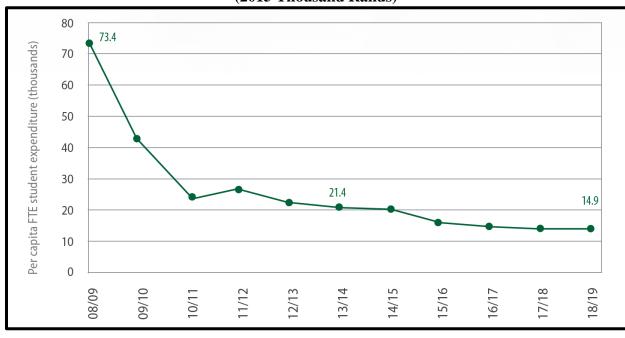


Figure 16 – Per Student Expenditures at Public TVET Colleges (2015 Thousand Rands)

Source: National Treasury

The authorities themselves have acknowledged that: "in recent years TVET college quality has been compromised because of the pressure to increase enrollments without compensatory increases in staff and other resources."

TVETs have been neglected in government's higher education planning. Furthermore, they have been given the short end of the stick in the context of increased spending on university education in response to the student protests. The TVET sector experienced budget cuts as a result of the protests, even though they

are under-funded to support all qualifying students. It does not make sense to sacrifice the masses of poor students in the TVET sector in order to increase enrollment at universities, which prioritises middle-income students (Horn, 2018, p. 4).

Another twist to the institutional differentiation story is that low-income students enrolled in good-quality private institutions are not eligible for financial aid in the same way as South African students attending public higher education institutions are. Before December 2017, neither the student loan program administered by NSFAS or the new student aid scheme launched in 2017 (Ikusasa Student Financial Aid Programme - ISFAP) were available to students attending a private higher education institution. Today, the latter do not benefit from the targeted free tuition scheme, even when their family income falls below the eligibility threshold of 350,000 Rands.

Thirdly, and related to the previous issue, is the challenge of making fundamental changes to the funding regime without prior assessment of the financial sustainability of the proposed changes, as happened with President Zuma's decision to move to a Targeted Free Tuition system. According to DHET's own appraisal of the situation, it was clear even before December 2017 that the South African higher education system needed revamping and had been largely underfunded, even under the cost-sharing system that has operated in the past decades.

"Yet this university sector remains much smaller than in other upper-middle-income countries, and it is now confronted by the challenge to find an appropriate funding model during a period of fiscal stress in order to allow more first-generation university students to study successfully. Failure to find such a model may well lead to continued social instability on university campuses, with possible dire consequences for further development." DHET, 2018, p. 14

The introduction of the targeted free tuition policy has made the need for additional public resources even more of a priority. In a 2018 interview with University World News, Professor Thandwa Mthembu, the chair of Universities South Africa, expressed similar concerns. Asked what was his upmost worry about the future of higher education in the country, he answered that "the South African public higher education system could go the same route the public schools system has gone – deteriorated almost beyond repair as a result of many policies that focus more on the growth of the system at the expense of infrastructure, funding and quality of entrants and other important aspects of the education process". ¹⁴

To implement the new funding policy, which has begun to transform latent demand for higher education into active demand, the Government increased the higher education budget in a significant way in 2018 and 2019. Table 57 shows that the share of GDP going to public spending on higher education rose to 1.2% and 1.3% in 2018 and 2019, respectively, from 0.9% in previous years.

¹⁴ University World News, 11 February 2018. http://www.universityworldnews.com/article.php?story=20180207130509500

Table 57 – Recent Evolution of the Higher Education Budget

Spending as % of GDP	2018	2019
University Subsidies	0.67%	0.68%
Student Aid	0.54%	0.61%
Total	1.21%	1.29%

Source: Treasury

Notwithstanding this impressive effort, a 2019 assessment of the fiscal sustainability of the new targeted free tuition system by the World Bank concluded that the very high cost of the subsidy and the large number of university and TVET students eligible for government grants would "have a negative impact on long-term fiscal sustainability" (World Bank, 2019, p. 58). While the report recognized the necessity to support financially poor students eager to access higher education and the desirability of converting loans to grants covering both tuition fees and living expenditures, it warned that the resource constraints could have adverse consequences.

... extending such support to too large a pool of students will diminish the public resources available to admit more students into PSET. Our analysis suggests that more than 90% of potential PSET students could benefit from the new NSFAS criteria. This would in turn put a huge strain on the fiscus, equivalent to about 1 percentage point of GDP, leaving fewer public resources to increase admission capacity without compromising education quality. This imbalance is likely to create frustration among potential students, many of whom will be barred from entering the PSET system, despite now being eligible for financial support (World Bank, 2019, p. 58).

Fourthly, even when sufficient financial resources are available to fund student aid, the management capacity of the agency responsible for screening potential beneficiaries and distributing the financial aid is a key element. Evidence shows that NSFAS has been beset by numerous problems, including insufficient funding and poor administrative systems. A recent survey revealed that NSFAS owed half the South African universities close to 1 billion Rands for payments corresponding to the 2016-17 academic year. The poor track record of NSFAS not only contributed to the rise of the #Feesmustfall movement, but it appears that the performance issues have continued after the introduction of the targeted free tuition policy, fueling student anger and causing disturbances in many universities. Events in recent months have shown that NSFAS' managerial capacity is weak, as the institution has struggled to fulfill its obligations in terms of payment of bursaries and meal allowances. The agency appears to be plagued by bureaucratic problems that have led to the rejection of thousands of applications from eligible students and lengthy delays in catching up with payments from previous academic years (Phakgadi, 2019; Valley *et al.*, 2019)).

 $^{^{15}\} https://select.timeslive.co.za/news/2018-02-06-nsfas-owes-varsities-close-to-a--billion-rand/$

The fifth observation coming out of the South African case is that efforts to improve opportunities to enter higher education for under-represented students must be matched by effective retention programs to support these students during their studies.

Finally, it would seem that the promise of distance education has not been fulfilled. Even though UNISA plays an important role in the South African higher education landscape, accounting for 17% of total enrollment, its results are not impressive. At 11%, the average graduation rate has remained extremely low, according to 2015 data (UNISA, 2016).

3.4.6 Summary Analysis of Equity in South Africa: Strengths, Challenges and Suggestions Strengths

- A more balanced geographical spread of higher education institutions and campuses throughout the country since the end of apartheid has helped serve under-represented groups and drastically augment the number of black students.
- Improved funding for students from disadvantaged backgrounds through grants and, more recently, the elimination of tuition fees for the lowest income groups has contributed to raise access.
- The Government has put pressure on universities to diversify their racial composition and take in more students from poorer backgrounds. Universities have been responsive in enrolling a more diverse student and academic body.
- South Africa has the largest open university in the continent, offering opportunities to students who cannot access regular higher education institutions.

Challenges

- The race gap has been closing very slowly and black students are still grossly underrepresented.
- The financial sustainability of the targeted free tuition scheme is problematic. The decision to eliminate the fees was unplanned and has put great pressure on the Treasury. It may compromise the ability of the Government to improve quality in the historically black universities and the TVET colleges, which cater mainly to black / low-income students and offer limited employment prospects.
- Black / low-income students enrolled in private higher education institutions are denied the benefit of free tuition.
- Retention remains a serious issue, especially for traditionally under-represented students
 who have low rates of progression and graduation. This reflects the poor quality of
 secondary education, the absence of adequate articulation mechanisms for the transition to
 the post-secondary level, and the lack of effective academic support programs in higher
 education.
- UNISA, the Open University, has a very low success rate, which undermines its
 contribution as a meaningful alternative road to higher education qualifications for underrepresented students.
- While affirmative action has successfully brought more diversified academic staff on board, there is a concern that it may have come at the cost of quality.

Suggestions

- The Government of South Africa needs to elaborate a sustainable financing policy for the higher education sector to ensure that the targeted tuition free policy can be maintained without compromising the quality of the institutions and their programs, especially those with a predominantly black student population.
- There is an urgent need to modernize the management of grants and student loans to ensure proper targeting and efficient payments. The Government of South Africa may also consider moving to an income-contingent loan system after the Australian model.
- It would be fair to apply the "targeted tuition free" policy to all South African citizens regardless of the type of institution they are enrolled in (public or private), provided the institutions are recognized as delivering good quality programs by the Council of Higher Education.
- Momentous efforts are needed to improve the quality of primary and secondary education
 for black students, put in place outreach and bridge programs to facilitate their access to
 higher education, and strengthen retention interventions to significantly raise progression
 and graduation rates for under-represented students.
- UNISA could incorporate lessons from the experience of successful distance-education institutions in other countries to enhance the quality of its programs and improve retention, with special attention to the learning needs of students from underprivileged groups.

3.5 The Case of Vietnam

3.5.1 Overview of the Higher Education System

The Vietnamese higher education system has experienced rapid expansion in the past decades. Between 2005 and 2017, for instance, total enrolment grew from 1.2 million to 2.3 million, amounting to a 64 percent growth in 12 years. However, in spite of this impressive increase, Vietnam still trails many of the countries in its region (Table 58). Other countries with a similar starting point, such as China and Indonesia, did significantly better than Vietnam during the same period. In 2010, the Gross Enrollment Rate of the three countries was almost equal, but by 2017 Indonesia's was at 36% while China's had almost doubled.

Table 58 - Tertiary Education Gross Enrolment Ratio (%)

Country	2006	2010	2017
Australia	72	81	113
China	20	27	51
Indonesia	17	23	36
Japan	56	58	64
Malaysia	n.a.	37	45
Philippines	28	30	35
Singapore	n.a.	n.a.	85
South Korea	97	103	94
Thailand	45	50	49
Vietnam	17	23	29

Source: UNESCO Institute of Statistics

Table 59 presents the distribution of enrolment by type of institution and its evolution between 2005 and 2017. It shows that much of the growth has come from the public sector, which in 2017 absorbed 95% of the total enrollment.

Table 59 - Enrolment in Tertiary Education by Type of Institution (2005 - 2017)

Type of Institution		per of ations 2017	_	lment 000) 2017	Share 2005	e (%) 2017
Public Universities	68	170	928	1,464	78.1	64.4
Open Universities	0	2	0	26	0.0	1.1
Private Universities	16	65	106	206	8.9	9.1
Public Colleges	99	355	145	460	12.2	20.3
Private Colleges	4	40	9	115	0.8	5.1
Total	167	630	1,188	2,271	100.0	100.0

Source: Ministry of Education and Training (MOET), Ministry of Labor, Invalids and Social Affairs (MOLISA), Government Statistics Office

The rapid increase has been fueled by the recognition that higher education is a strong engine of social mobility. The 2017 Poverty report prepared by the World Bank revealed that higher education had a substantial positive effect on household poverty and long-term earnings. About 93 percent of people living in households headed by a person with post-secondary education are classified as economically secure, with 35 percent belonging to the middle class. Only 7% are be at risk of being among the extreme poor, moderate poor or economically vulnerable groups. (World Bank, 2018).

3.5.2 Equity Snapshot

Household surveys provide useful data on the enrollment rates of the respective income quintiles and their evolution over time (Table 60).

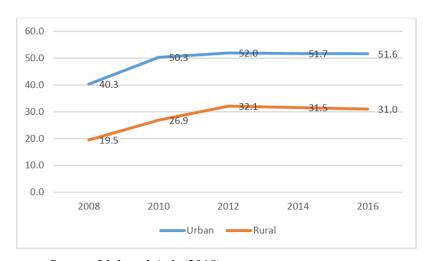
Table 60 – Enrollment Rates by Income Quintile

Country	2006	2016
Q1	1.0%	6.5%
Q2	5.9%	15.9%
Q3	12.3%	29.5%
Q4	21.5%	44.0%
Q5	38.8%	62.9%
Q5 / Q1	35.6	9.6

Source: Vietnam Household Living Surveys 2006 and 2016

The numbers show high levels of inequality, even though the situation has relatively improved over the past decade. A significantly large portion of the increased opportunities at the higher education level went to the top three quintiles. While the disparity ratio went down from 36 to 10, the absolute gap in enrollment rate between the richest income group and the poorest one has increased, from 34 percentage points in 2006 to 57 in 2016. Similarly, whereas the proportion of students whose parents did not complete high school increased by 11.5% over the same period, those whose parents finished high school rose by 25%. These inequalities are reflected in the persistent enrollment gap between urban and rural areas (Figure 17).

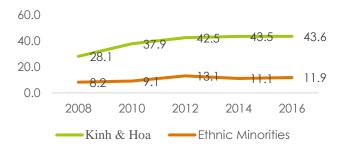
Figure 17 – Gap in GERs between the Urban and Rural Areas



Source: Linh and Anh (2018)

Youths from ethnic minority groups are also in a disadvantaged situation. For example, young people from the majority ethnic groups Kinh and Hoa are 30 percentage points more likely to have access to higher education than students from minority ethnic groups (Figure 18). Using decomposition techniques, a recent World Bank study showed that more than 55 percent of this gap is due to lower high school graduation rates for the minority group. Even more worrisome is the observation that the gap in access rates has increased steadily from 13 percentage points in 2006 to 30 percentage points in 2016.

Figure 18 - Gap in Higher Education Access Rates Between Kinh/Hoa and Ethnic Minorities



Source: World Bank, 2019

The quality of high school is an important factor explaining the lower higher education participation of students from low-income households and minority ethnic groups. Notwithstanding Vietnam's highly acclaimed PISA results overall, it seems that the secondary education system does not offer homogeneous learning opportunities throughout the country. Learning conditions at rural schools (physical infrastructure and quality of teaching) are widely seen as being of lesser quality than at urban schools.

Additional analysis of the Young Lives data revealed that the high PISA scores come from an imperfect sample that has a larger-than-normal proportion of young people from wealthy families. Looking at data covering all Vietnamese children (including those at 15 years of age who can be compared to PISA-testing children) shows that the math and reading scores of children whose parents attended themselves high school are 0.22 and 0.35 of a standard deviation higher, respectively (Glewwe and Krutikova, 2017). Similarly, the math and reading scores of ethnic minority children are significantly lower than those of the general population (0.38 and 0.47 standard deviations). The fact that many families rely on private tutoring to help their children improve their chances of doing well at the university entrance examination amplifies these disparities between low-income and high-income families.

The equity situation is much better when it comes to gender balance. As can be seen in most parts of the world, the proportion of females who access higher education in Vietnam is now slightly larger than that of men, having risen from 48% in 2006 to 54% in 2016. The proportion of female graduates has followed a similar pattern.

To complement this positive picture of gender balance in higher education, it is important to look at two additional aspects: (i) the proportion of female students in STEM programs; and (ii) the presence of women in senior academic and leadership positions. With respect to STEM programs, even though MOET does not track the gender distribution of enrollment by field of studies, looking at the websites of the 39 Vietnamese universities that focus essentially on STEM programs reveals a proportion of 34% of female students. This is significantly better than the proportion of women in engineering studies in the United States, which is about 25%. However, this is still far from the ideal of 50% that any country should aim for. In the case of Vietnam, the fact that two-thirds of women are concentrated in humanities and social sciences means that they are disadvantaged in terms of labor market outcomes, especially when it comes to salaries and benefits.

The situation is also worrisome when it comes to the place of women in the academic profession. While the proportion of female academics went up from 42.5 to 48.5 between 2006 and 2008, less than 10% of the full professors are women. Finally, a survey of the website of all Vietnamese universities indicates that only 12 university rectors are women, out of more than 200 universities and institutes. This corresponds to a 5.6% ratio, which is about half of the European average (10.3%).

The issue of corruption when it comes to the high school exam should also be mentioned, as it impacts access to higher education. Several scandals in recent years have revealed widespread "interference" with exam results in favor of children from rich families in remote areas, as illustrated by the following news headlines: "Dozens of students expelled, drop out as 2018 exam scandal fallout"... "Five sentenced in Hà Giang school exam scandal"... ¹⁶ The fact that children from well-off families jump the line means that students from low-income households get turned away. More generally, these cases undermine the faith of the general population in the fairness of the admission system.

3.5.3 Government Equity Promotion Policies

The Ministry of Education and Training (MOET), through its Higher Education Department, is responsible for defining national policies in higher education. Until recently, the 2012 Higher Education Law was the main official document spelling out Vietnam's higher education development strategy. The Law was substantially amended in 2018 and the new version came into effect in January 2019. The main changes concern the development of quality assurance and measures to grant more institutional autonomy to certain categories of universities.

The Soviet influence on the governance of higher education in Vietnam can be seen most visibly in the centralized approach adopted since the unification of the country in 1975 (World Bank, 2019). This means that MOET controls many aspects directly linked to the governance and management of higher education institutions, including the private ones. For instance, the Ministry exercises system-wide control of curriculum structures, enrolment quotas, and approvals for new academic programs.

Vietnam does not have a standalone equity policy document, nor does it have an agency dedicated to equity promotion in higher education. Similarly, the quality assurance criteria do not take equity elements into consideration. However, the Higher Education Law and the subsequent decrees issued by MOET have specific provisions for the promotion of equity in higher education. Decision 711/QD-TTg issued in June 2012 gives more details on the Strategy for Education Development (2011-2020), which emphasizes "enhancing education support to disadvantaged areas, ethnic minorities and social policy beneficiaries".¹⁷ For this purpose, the policy documents specifically identify the following five equity target groups:

https://vietnamnews.vn/society/537465/five-sentenced-in-ha-giang-school-exam-scandal.html

 $^{^{16} \, \}underline{\text{https://e.vnexpress.net/news/news/dozens-of-students-expelled-drop-out-as-2018-exam-scandal-fallout-3912072.html}$

^{17 &}quot;Law on Higher Education" The Socialist Republic of Vietnam, Hanoi June 18, 2012 (http://www.ilo.org/dyn/natlex/docs/ELECTRONIC/91570/126459/F-1636213549/VNM91570% 20Eng.pdf)

- Low-income students;
- Female students;
- Ethnic minority groups;
- Students with disability; and
- War orphans or children of war invalids or martyrs.

Article 12 of the 2012 Higher Education Law defines the equity dimension in higher education in several ways. First, it affirms the principle of equal treatment and services for all students. Second, it provides for preferential admission policies for certain groups in society:

"Priority is given to social policy beneficiaries, ethnic minority people and people in regions with exceptionally difficult socio-economic conditions, and to students in certain majors to meet human resource needs for socio-economic development; implementing gender equality in higher education."

Finally, it calls for financial support to reduce the barriers faced by students. Decree 86/2015/NĐ-CP translates this policy in specific measures, including tuition exemptions and financial aid for certain groups.

Compared to the 2012 Law, the new Law does not mention equity explicitly. But it has kept the same article about affirmative action and gender equality quoted above. The only novelty is that the 2019 Law calls for equal treatment among public and private higher education institutions. But to date MOET has not made any announcement about concrete measures to implement this provision, and low-income students enrolled in private institutions are still not eligible for government subsidies.

While Vietnam does not have concrete targets for the participation of low-income students, it has a clear target for the enrollment of ethnic minority students. Resolution 52/NQ-CP specifies that, by 2020, ethnic minority students should be at 130 to 150 per 10,000 persons.

The current equity policies include monetary instruments (scholarship, tuition exemption/reduction, student loans) and non-monetary instruments (affirmative action through bonus points on entrance exams, and quotas of admission for students from remote areas).

Financial Equity Promotion Instruments

Financial measures are an important part of the Government of Vietnam's equity policies, since public universities are encouraged to generate a growing part of their resources by charging tuition fees. As a result, tuition fees account today for 55% of the total revenues of public universities. Public universities charge fees in two ways. In addition to the regular programs with lower fee rates, universities charge higher fees for programs (called "high-quality") with good market value.

These fees can represent a significant barrier for low-income students. According to the 2016 Household Survey, average per student spending on university education was equivalent to US\$497 for the poorest quintile, representing 23% of per capita income, compared to \$1,665 for the richest quintile (World Bank, 2019). On average, tuition fees at public universities and colleges amount to about 10 million VND per person per year (equivalent to 440 US\$). Vietnam per capita income is about US\$ 2,500 or 58 million VND. Thus, tuition fees represent 18% of per capita income on average. Figure 19 shows the degree of inequality in household expenditures among

various groups within Vietnamese society, reflecting the difficulty that poorer households have in facing the high cost of higher education.

Quintile 5 26,903 Quintile 1 7,486 Male 21,363 Female 18.087 **Ethnic minorities** 12,596 Kinh/Hoa 19,954 Rural 16,599 Urban 23.295 0 5,000 10.000 15,000 20,000 25,000 30,000

Figure 19– Household Spending for Higher Education (2016, VND)

Source: Linh and Anh (2018)

The major policy document regulating monetary instrument is Decree 86/2015/NĐ-CP on tuition policies. The following categories of financial aid are available:

- <u>Full Tuition Exemption</u>: available to students in pedagogical universities/colleges; students in certain fields or schools that are considered as essential for economic development, national defense or public security as designated by the Higher Education Law; students with a parent designated as war hero, war invalid or martyr; students who got admitted through the quotal system without taking the entrance exam; students from minority ethnic groups living in disadvantaged areas or considered as poor; and disabled students from households regarded as poor.
- <u>70% Tuition Reduction</u>: available to art students; students in programs leading to dangerous occupations; and students from ethnic minorities living in disadvantaged areas.
- <u>50% Tuition Reduction</u>: available to students with a parent receiving a pension as a result of an occupational accident or disease.
- Merit Scholarships: available to top students. Universities are mandated by Government to devote 15% of their tuition fee income to the support of merit scholarships.
- <u>Policy Scholarships</u> of VND 360,000 per month (equivalent to 16 US\$): available to quota students exempted from taking the entrance exam.
- <u>Priority Subsidy</u> of VND 300,000 per month (equivalent to 13 US\$): available to students with a parent designated as war hero, war invalid, or martyr.
- <u>Social Subsidy</u> of VND 140,000 per month (equivalent to 6 US\$): available to ethnic minority students from mountainous areas; disabled students; orphans who lost both mother and father; outstanding students from poor or near-poor families.

• <u>Education Subsidy</u> equivalent to 60% of the minimum monthly salary: available to ethnic minority students from poor or near-poor households. In 2018, the minimum wage was 1,390,000 VND per month (equivalent to 60 US\$).

These financial support benefits are available only to students enrolled in public universities.

The Government sets tuition fees and the scholarship amounts through a Government Decree (Decree 86/2015/ND-CP). Decrees in Vietnam are often dictated by the line Ministries (MOET in this case) but are prepared in consultation with other ministries, especially the Ministry of Finance. However, the tuition fees set by the Government are only guidelines regarding the tuition ceilings. In practice, the actual levels of tuition fees are set by the universities within the legal regulations and linked to their own development targets. Private universities are free to establish their own tuition rates.

While official figures on the coverage of these promotion policies are not available, estimates from the 2016 Household Survey (VHLSS 2016) show that 10% of the students received a tuition exemption or reduction, 3.5% received education subsidies, and 7.2% received a scholarship.

There is also a student loan program offering a preferential interest rate of 0.5% per month, which is run by the Social Policy Bank (VBSP). The Social Bank, a development bank owned by the State under the supervisory authority of the State Bank of Vietnam, operates independently as the main agency for student loan policy. The eligible beneficiaries should have at least one of the following characteristics: (i) being orphans; (ii) coming from a poor or near-poor household; or (iii) coming from a family that has incurred a sudden economic disaster such as a natural catastrophe, a fire, a serious disease or health issues. Students from both public and private institutions can get a loan from the Social Policy Bank. As of 2017, the maximum loan amount was VND 1,500,000 per month (equivalent to 65 US\$). By 2016, about 3.3 million students had benefited from loans. Repayment levels are very high, with loans in default representing less than 1% of the overall student debt. 18

Non-Monetary Equity Promotion Measures

The main non-monetary policies come in the form of affirmative action. First, students from specific target groups can receive bonus points for the university entrance examination. The criteria for eligibility are geographical area, ethnic groups, income level of the family, and other family-related factors (such as having one parent who is a war hero, martyr or invalid), or any combination of these aspects.

This policy is complemented by a special one-year pre-college program reserved for children from ethnic minorities groups living in disadvantaged areas (Circular 41/2013/TT-BGDĐT). Applicants must either belong to ethnic minorities living in the most disadvantaged areas (KV1) or be a member of very small ethnic minorities (less than 10 thousand population).

After the one-year catching-up program, the students who finish the pre-college courses with over 5/10 GPA can apply to universities and colleges. The pre-colleges courses are often held in regional universities located in the areas with large number of ethnic minority populations, such

-

 $^{^{18} \ \}underline{\text{https://dantri.com.vn/giao-duc-khuyen-hoc/tang-muc-cho-vay-doi-voi-hoc-sinh-sinh-vien-len-1-25-trieu-dong-thang-} \\ 20160106212403289.\underline{\text{htm}}}$

as Northwest University, Tra Vinh University or the People University, which operates under the Committee for Ethnic Minority Affairs.

Second, in 2006 the Government of Vietnam set up admission quotas for students from remote areas (Decree 134/2006/NĐ-CP). It allows citizens under 25-year-old living in the mountainous or disadvantaged rural areas to enter colleges and universities without taking the entrance exam. The successful candidates also benefit from scholarship and tuition exemption policies as mentioned above. The Provincial People Committee (PPC) propose the quotas, which are then referred to MOET for approval. Priority is given to students from ethnic minorities. After graduation, the students must work in their province of origin for at least 5 years, or face penalties.

3.5.4 Equity Promotion Policies at the Institutional Level

Vietnamese universities have little tradition of giving priority to equity considerations in their strategic plans. Being inclusive is not a government requirement and, therefore, few institutions take initiatives in this area. Vietnamese higher education institutions are generally content with complying with government policies regarding tuition exemptions, for which they get compensatory resources, and the affirmative action scheme. In the latter case, universities are often reluctant, as they perceive special admission criteria as a factor that undermines their prestige as a selective institution. Some universities have their own scholarship program, but these tend to be merit-based scholarships, without taking equity criteria into account in any systematic way. The main motivation is often linked to marketing considerations as universities compete to attract the best high school graduates.

There are a few notable exceptions. The Tuoi Tre Newspaper higher education institution, for example, has had a long tradition of "needs-blind" admission. Students who qualify academically but are too poor to afford the tuition fees get a generous scholarship. Also, in recent years, individuals have resorted to crowd-funding initiatives to help needy students, as was the case with Professor Phan Thanh Son Nam's initiative at Ho Chi Minh City's University of Technology.

The following list summarizes the main activities undertaken by Vietnamese universities to promote equity:

- Affirmative action through bonus points given in the entrance examination to students from ethnic minorities living in remote areas; children from war invalids or martyrs, and other "priority" groups. These policies are determined by the Government.
- Free tuition and scholarship for priority groups.
- Need-based scholarships for poor students using the university's own resources. This is often done in combination with the merit-based scholarship as well.
- Free tuition and a monthly stipend of 100,000 VND for disabled students from poor or near poor households. This is the uniform policy edicted by Government. Only students who are both poor and disabled are eligible.

3.5.5 What Works: Impact of Equity Policies

MOET is responsible for monitoring all major dimensions of the higher education's performance and operation. The Department of Undergraduate Studies within the Ministry of Education is in charge of the implementation and monitoring of the tuition fee reduction / exemption policy. In practice, however, no statistics are publicly available to monitor the scope and evolution of

disparities in higher education, apart from the results of the household surveys. No impact evaluations have been conducted to inform policy makers on the effectiveness of existing equity programs and measures, neither for financial aid (tuition exemption, scholarships) or for non-monetary support mechanisms, such as the affirmative action program for ethnic minorities, which has proven controversial. With respect to the latter, some observers affirm that it is useful while others claim that it has not been effective. It is hard to make an objective assessment in the absence of hard evidence. In any case, it appears that the numbers of students benefiting from this admission channel is quite small.

The lack of detailed information on equity aspects is a major hurdle. No single department within MOET is responsible for equity issues. Outside MOET, the Committee for Ethnic Minority Affairs (CEMA) is in charge of all issues related to ethnic minorities and collects an Ethnic Minority Survey in the country. MOLISA, the Ministry in charge of technical colleges does monitor gender equity, but MOET does not.

Even though MOET oversees the higher education system in a centralized manner, being the Ministry with the widest range of responsibilities for the higher education system, it is not always able to enforce compliance with its regulations. This is especially visible in the area of monitoring and evaluation, in the absence of a comprehensive management information system for the entire higher education system. Although all higher education institutions are legally required to provide an annual report to MOET on their activities and results, and to put detailed information on their website (under a policy entitled "Three Disclosures"), a large proportion of public universities do not do so, and there is no mechanism for holding them accountable.

A review of a few strategic plans of Vietnamese universities shows that the issue of gender equity for senior academics and institutional leaders is not high on the development agenda of universities.

In the absence of surveys to investigate at the social conditions of students, anecdotal evidence suggests that the total amount of financial aid available is by far insufficient to help needy students. Monthly stipend amounts are very low, barely adequate to cover the living expenses of low-income students, especially those who come from remote areas. Poor students are barred from enrolling in private higher education institutions because of the high cost. Furthermore, the various scholarships schemes and student loans mechanisms are fragmented and there is total lack of transparency on who gets what under what conditions.

While the Social Bank works with the universities who are responsible for processing loan applications on behalf of VBSP, there is little coordination with the Ministry of Finance, and there is no MOET representative on the Board of the Social Bank.

3.5.6 Summary Analysis of Equity in Vietnam: Strengths, Challenges and Suggestions

Strengths

- Rapid expansion of the higher education system has helped increase the number of students from traditionally under-represented groups (low-income households, rural areas, minority ethnic groups).
- Affirmative action policy, in particular, gives better access opportunities to students from disadvantaged groups and areas.

- Vietnam has achieved good results in reducing the gender gap in higher education in terms of both access and success.
- Tuition exemptions and small scholarships are available to help needy students overcome the financial barriers.
- Student loans help needy students enrol in both public and private institutions.

Challenges

- Notwithstanding the rapid growth of the higher education system, the enrollment gap between high-income and low-income groups, urban and rural areas, and majority ethnic groups and minority groups continue to be substantial.
- The Government of Vietnam does not have a comprehensive strategy with concrete targets to reduce disparities in higher education for low-income students. There are few interventions to reduce disparities in secondary education, build outreach and bridges for increased access to higher education, and encourage higher education institutions to implement retention programs to improve graduation chances of disadvantaged students.
- While female enrollment is not an issue, girls are overwhelmingly concentrated in humanities and social sciences programs, which are less prestigious and have less favorable labor market outcomes, especially in terms of future earnings.
- The level of financial aid available is largely insufficient to address the needs of all students facing substantial financial barriers. This is especially true in the case of students enrolled in private institutions, which are increasingly prohibitive for low-income students.
- The Ministry of Education and Training does not monitor equity closely. Insufficient data and monitoring of equity situation

Suggestions

- The Government should improve secondary education, with a focus on reducing disparities between urban and rural schools and better preparing students from disadvantaged groups to ensure equal opportunities of access to and success in higher education.
- Setting up good-quality online programs could help bring higher education opportunities to students in remote areas.
- There is a need to establish and implement a comprehensive and well-targeted financial aid scheme that benefits the poorer income quintiles.
- MOET should put in place incentives to encourage higher education institutions to have more outreach and retention programs to increase the completion rate of under-represented students.
- The Government should establish a comprehensive management information system to monitor the scope and evolution of disparities in higher education.

4. Lessons from the Case Studies: Common Threads and Diverging Paths

4.1 Overview of the Case Studies

Table 61 presents a few statistics that help compare the core features of the equity situation and the main determinants in the five case-study countries that this report has focused on.

Table 61 – Basic Statistics from the Five Case-Studies (latest available year)

Indicator	Australia	Austria	Colombia	South Africa	Vietnam
GER	122%	83.5%	52%	20%	29%
GER of Q1	15.25%*	n.a.	11.3%	n.a.	6.5%
Q5 / Q1	n.a.	n.a.	5.0	13.3	9.6
Dropout rate for lowest income quintile	16.5%	n.a.	12.2%	n.a.	n.a.
Share of female students	55.5%	53.5%	53%	58%	54%
Share of female university leaders	28.2%	33.0%	20.0%	15.4%	5.6%
Share of private enrollment	8.5%	2.4%	49.8%	12.4%	5.1%
Share of non-university & open education enrollment	8.0%	21.6%	30.3%	55.2%	21.4%
Public funding for higher education as % of GDP	0.8%	1.5%	0.8%	0.9%	0.3%
Per capita GDP (\$PPP)	52,573\$	52,137\$	14,943\$	13,675\$	7,510\$
% of students who are partially or fully exempted from paying fees in public institutions	None	All	10%	60%	10%

^{*}Equity group defined as Low SES Postcode

From an institutional viewpoint, Table 62 compares the main features of the five countries when it comes to national equity policies, based on the findings of last year's report and this year's case studies. The results reflect a considerable range of policy commitment levels and wide degree of comprehensiveness of the policy framework for equity.

Table 62 – Institutional Dimensions

Indicator	Australia	Austria	Colombia	South Africa	Vietnam
2018 Lumina Assessment	Advanced	Established	Established	Established	Developing
Standalone Equity Policy Document	√	1	-	•	1
Clear Equity Targets	√	Partially	-	√	-
Equity Criteria in QA	√	Gender	-	-	-
Government-Sponsored Policy Research on Equity	√	-	-	-	-
Comprehensive Equity Monitoring	1	-	-	1	-

Another useful dimension of comparison across the five countries is the definition of equity target groups (Table 63). It is interesting to observe, for instance, that South Africa does not specifically mention "low-income students" as an official equity group but rather focuses on race because of the legacy of apartheid. At the same time, the new targeted free tuition policy is determined in terms of household income threshold. And, notwithstanding the priority given to the promotion of Black students, those enrolled in private higher education institutions are discriminated against because of the political mistrust of anything private.

Comparing the definition of equity target groups in the five case study countries confirms earlier observations that the definition of these categories is related to specific social and cultural contexts (Salmi and Sursock, 2018). Each country grapples with its own diversity issues and the pertinent categories of underserved student groups.

Table 63 – Definition of Equity Target Groups

Country	Australia	Austria	Colombia	South Africa	Vietnam
Low-Income Students / First In the Family	7	1	7		7
Gender / LGBT	٧	√	√	√	√
Race			√	√	
Ethnic Minorities	√		√		√
Students with Disability / Special Needs	7	1	7	1	7
Migrants	1	٧			
Victims of Conflict / Orphans			V		1
Remote Regions		√	√		

Finally, Table 64 attempts to measure the intensity of support for equity in the five countries, revealing significant differences linked partly, but not exclusively, to the wealth of the respective countries. One interesting finding is that, of the two countries with the sharpest disparities (South Africa and Vietnam), equity is high on the national political and policy agenda of South Africa because of the apartheid experience and the #feesmust fall movement, whereas in the case of Vietnam equity promotion takes the backseat, perhaps under the assumption that socialist policies automatically result in equal social outcomes.

Table 64 – Intensity of Support for Equity in Higher Education

Indicator	Australia	Austria	Colombia	South Africa	Vietnam
Government Financial Aid Policy	+++	+	++	+++	+
Government Non-Monetary Equity Policy	+++	++	+	+	++
Institutional Financial Aid Policy	+	+	+	+	+
Institutional Non-Monetary Support	+++	++	+++	++	+

Note: +++ high level of support; ++ medium level of support; + low level of support

4.2 What Works: National Policies

4.2.1 General Observations

Need for Impact Studies. Considering that the primary objective of this comparative study of five countries across the world was to establish what is known about effective equity policies, the first finding worth underlining is the absence of rigorous impact studies to establish with precision what works and what does not work. Even in Australia, whose comprehensive equity promotion policies can be seen as a model for many countries, there is a dearth of impact studies. The reviews of impact studies by the World Bank (2019) and Sutton Trust (2014) revealed that most of those that are available come from the United States. As such these studies may have limited relevance to other parts of the world, especially developing countries, as the institutional context and the characteristics of the student populations may be very different.

<u>Importance of Strong Databases</u>. The second, related finding is the insufficient availability of relevant data to measure disparities and monitor the effects and consequences of equity promotion policies. While Australia stands out as one of the countries with the most wide-ranging sets of equity data, the other countries are missing data for some of the equity groups that they define in their policy documents. Austria, Colombia and Vietnam, for example, do not have national data on the socioeconomic origin of students. South Africa does not monitor students with disability, even though improving access and success for that group is part of the policy goals.

<u>Virtues of Alignment</u>. Thirdly, the country studies confirm one of the major findings of the 2018 Lumina study, namely that to achieve good equity results it is essential to have a high degree of alignment among vision of the leadership, policy goals, policy instruments, and resources. Having resources commensurate with the national equity agenda is of particular importance. Vietnam is the country that spends least for higher education in general, and for equity especially, meaning that the equity policy objectives remain at the level of political statements without concrete measures. In the past two years, South Africa has struggled with delivering on the political decision to offer free higher education to the poorest groups in society. Colombia has a successful and effective student loan agency but the lack of budgetary resources has limited its capacity to reach all needy students.

Political Continuity. The need for continuity in equity policies is a fourth lesson from the country experiences. The case studies illustrate how politics often get in the way of sound policies. To improve access and success for under-represented groups in the long run, it is important to stay the course and carry on with financial and non-monetary equity promotion policies in a consistent way, independently from political changes. Colombia has particularly suffered from policy changes from one government to the other, as the "Ser Pilo Paga" experience demonstrated. By eliminating tuition fees after just a few years, Austria may have missed the opportunity of increasing financial resources for higher education that could have been dedicated to equity promotion and at the same time making higher education financing less regressive than what happens in no-fee systems funded by the general tax system. Even in Australia, measures taken by the current Conservative government are threatening the availability of resources to fund equity promotion programs. In that context, measures taken in isolation from the main policy orientation can be harmful to the overall equity setup, as illustrated by the introduction of the "Ser Pilo Paga" program in Colombia, which seriously undermined the leading public universities and the national student loan agency.

Governance Model. Fifthly, it is interesting to contrast the Australian and Vietnamese modes of governance in relation to equity promotion policies. In the first case, where universities have a high degree of autonomy, the Government relies on financial incentives to support pro-equity initiatives at the institutional level. In the case of Vietnam, where the Ministry of Education controls the universities tightly, the institutions have few incentives to take initiatives on their own, including with respect to equity promotion policies. As a result, universities in the former are much more active in implementing outreach and retention programs than the Vietnamese universities, which follow government instructions faithfully.

<u>Supranational Agenda</u>. A sixth observation worth making is that Austria is the only example of a country whose equity promotion policies are influenced and strengthened by supranational considerations in the context of the Bologna process and the social dimension agenda promoted by the European Commission.

<u>Structural Features</u>. Finally, the case studies confirm the interplay of four structural elements that have a strong influence on the scope and magnitude of disparities in higher education: (i) development of the secondary education system and extent of streaming between general education and vocational training within high schools, (ii) level of selectivity in the admission policies of universities, (iii) degree of institutional differentiation of higher education systems, and (iv) availability of financial aid for students from disadvantaged groups.

Institutional diversification, in particular, can be a source of segmentation and discrimination. In that respect, the case studies signal two aspects, in particular, worth keeping in mind. First, a high proportion of non-university institutions is not always a favorable development from an equity viewpoint. South Africa and, to a lesser extent Vietnam and Colombia, show that under-privileged students are predominantly ending up in the less prestigious, poor quality non-university institutions such as the TVET colleges, the technical institutes or the distance education institutions, such as the Open University in South Africa, which has a very low graduation rate. Thus, institutional diversification works well only if flexible pathways are in place to facilitate mobility across sub-sectors, as happens to some extent in Canada and the United States where transfers from the community college segment to the universities is well organized.

Second, having a high share of students enrolled in private institutions is not good from an equity viewpoint, unless there is a solid student aid policy, as in the case of Colombia. But as far as South Africa and Vietnam are concerned, public policies are not supportive of the private higher education institutions. The lack of adequate financial aid means that students from underrepresented groups are discouraged to enroll in private institutions.

4.2.2 Financing Policies

Table 65 presents the range of financing instruments used by the five countries surveyed to promote equity in higher education. Australia has the most extensive and innovative system in place, combining resources going directly to needy students and incentives to universities. Furthermore, the income-contingent loan system gives a dimension of long-term financial sustainability that very few countries have. By contrast, South Africa also relies on several complementary instruments, but the lack of budgetary resources limits their influence.

Table 65 – Financing Instruments in Place at the National Level

Equity Policy Instrument	Australia	Austria	Colombia	South Africa	Vietnam
No Tuition / Low Tuition in Public Institutions		√	√		
Targeted Free Tuition				1	
Grants & Scholarships	√	√	√	√	√
Student Loans	√	4	√	4	7
Competitive Grants to Institutions	√				
Funding Formula	√	V		1	

A relatively small number of countries use a funding formula to allocate public resources to their public higher education institutions. Australia, Austria and South Africa incorporate equity-related criteria in the formula. In the case of Austria, a very small proportion (0.5%) can be retained by government if a university fails to show how it deals with the social dimension in its performance plan.

All five countries have a student loan system in place (Table 66). But student loans play a substantial role only in Australia and Colombia. The experience of South Africa shows that efficient management of bursaries and student loans is important to provide adequate support to needy students and avoid major political disturbances. What happened during the #Feesmustfall movement shows that the anger of the students was triggered by delays in the payment of bursaries and loans due to the failure of NSFAS to perform its functions effectively and efficiently. By contrast, the success of the Australian income-contingent loan system is due, to a large part, to its universal nature and the streamlined management through the income tax system. It is interesting to note that Colombia is currently contemplating migrating to an Income-Contingent Loan system. Finally, the low level of financing aid available to students in Vietnam can be seen as a major obstacle to the implementation of the country's official equity promotion goals.

Table 66 – Student Loan Design

Design	Australia	Austria	Colombia	South Africa	Vietnam
Income Contingent	√				
Public Agency – Mortgage Type			√	√	√
Private Bank – Mortgage Type		√			

The introduction of Targeted Free Tuition in South Africa is a fairly recent development that was captured by the 2018 Lumina study. The case study in this report indicates that this new approach, which is potentially more equitable, faces two major challenges. The first one is fiscal space. Policy-makers have found that it is one thing to decide to exempt large numbers of students from paying fees and another to be able to allocate the budgetary resources needed to finance this measure.

4.2.3 Non-Monetary Policies

The five case studies illustrate the fact that non-monetary policies to promote access and success for students from disadvantaged groups are best implemented by the higher education institutions themselves (Table 67). Australia is perhaps the most emblematic example of a country offering strong financial incentives to encourage universities to put in place policies and measures that best suit the local environment and characteristics of students. South Africa has followed a similar approach, but with more limited public resources offered as incentives. Austrian institutions have responded well to government policies in favor of gender equity. Colombia and South Africa are two countries where the higher education institutions, on their own, have taken many initiatives to be inclusive and work towards higher graduation rates for students from under-represented groups.

Table 67 – Non-Monetary Instruments in Place

Equity Policy Instrument	Australia	Austria	Colombia	South Africa	Vietnam
Outreach / Bridge	√	√	√		
Affirmative Action	√	1	√	√	V
Retention	√	√	√	√	

It is interesting to observe that, while all five countries pay a lot of attention to non-monetary equity policy instruments, only Australia and South Africa have dedicated resources to support the work of higher education institutions in this area (Table 68).

Table 68 – Non-Monetary Instruments in Place at the National Level

Intervention Modality	Australia	Austria	Colombia	South Africa	Vietnam
Assigned Public Resources	√			4	
Technical Guidance	√	√	√	√	

With respect to gender balance, all five case studies coincide in showing that, while all five countries have achieved gender balance in terms of enrollment, they have found it challenging to close the gender gap in STEM institutions and programs, in the top academic positions, and at the helm of higher education institutions. Ironically, the country with a socialist history, Vietnam, has the lowest proportion of female university leaders.

Students with disability were identified in the 2018 Lumina study as the "invisible" equity group. The five case studies presented in this report confirm the difficulties that countries and institutions find in ascertaining and addressing the needs of students with disability. The Australian experience points to the importance of giving resources directly to the higher education institutions and making them accountable for their results in achieving tangible progress in this area. In South Africa, by contrast, the fact that the government made bursaries available to students directly rather than working through the institutions has resulted in the under-utilization of the resources available to help students with disability and little progress in the majority of higher education institutions, especially the under-resourced Historically-Black universities and the TVET colleges.

4.2 What Works: Institutional Policies

The review of institutional approaches to promote access and success for under-served students in the five case study countries has revealed a number of good practices worth reporting. The first one is to have a clear strategy that can be either a stand-alone document or is embedded in the institutional strategic plan. This allows higher education institutions to mobilize their community and stakeholders around common equity objectives and targets.

Having a department responsible for all equity-related activities under the direct authority of an institutional leader is also an important factor of success. The University of Wollongong in Australia and Uniminuto in Colombia are good examples in that respect.

In low- and middle-income countries, partnerships between higher education institutions and firms can generate additional resources to finance scholarships for needy students. In the Colombian the Department of Antioquia, a public-private partnership bringing together the local authorities, a group of private universities and a number of private sector employers offers qualified low-income students who could not find a place in a public university the opportunity to study at one of the local private universities. The students get a scholarship equivalent to 75% of the tuition costs and receive a loan from ICETEX for the remaining 25%.

Sometimes, good practices put in place by a single institution may be picked up by other institutions or by government itself to design and implement scalable strategies. In Colombia, for instance, the success of Uniminuto's approach with regional campuses strategically located in marginal urban zones to reach students from under-represented groups influenced the Ministry of Education in the development of the CERES program mentioned earlier.

Experience from Colombia, South Africa and Vietnam points to a special challenge faced by elite public or private universities keen on becoming more inclusive. Beyond ensuring increased access for traditionally under-represented students through outreach and affirmative action programs, it is equally important to provide a welcoming environment for first-generation students who may feel uncomfortable when the institutional culture is heavily influenced by the social norms of a majority of students from privileged families. Even in Australia, lack of social capital adversely affects the chances of first-generation students to find internships and prepare for employment. It is therefore critical to provide appropriate support and a favorable socio-cultural environment.

5. Conclusion

"What is not defined cannot be measured. What is not measured, cannot be improved. What is not improved, is always degraded."

Lord Kelvin, British physicist and mathematician (1824 – 1907)

The five countries selected as case studies come from very different regions of the world. Yet, they share common features and illustrate converging trends that suggest a number of relevant lessons to be shared in the context of WAHED II and beyond. They reinforce, in particular, the observation made in the 2018 Lumina study that national commitment, translating into comprehensive, well-resourced policies, is indispensable to design and implement effective equity promotion policies to overcome both financial and non-monetary barriers. A long-term view is key to guaranteeing continuity and consistency in equity promotion policies.

The findings of this report can be translated into five policy recommendations for countries and institutions keen on reducing disparities and offering equal opportunities in higher education:

- Equity policies must be defined in a comprehensive way, taking both financial and non-monetary aspects into consideration, coordinating national-level and institutional level actions in a complementary manner, and putting as much emphasis on success as on access, which has traditionally received more attention.
- It is important to undertake impact studies to measure which interventions and combinations of interventions are most effective more systematically and rigorously. Such studies should be encouraged in all countries that have explicit equity promotion policies in higher education.
- Appropriate monitoring of equity promotion policies requires well-established information systems to identify all equity groups and measure progress in terms of access and graduation.
- More work is needed to identify and evaluate effective policies to improve gender balance in STEM institutions and programs, in the top academic positions, and in university leadership functions.
- Greater priority must be given to students with disability in terms of defining their needs, providing sufficient resources, and empowering higher education institutions to place this dimension high on their equity agenda.

To conclude on a positive note, notwithstanding the challenges encountered at the national and institutional levels and the lack of adequate data to monitor equity in higher education, there is room for celebrating the impressive progress achieved, as illustrated by the case studies analyzed in this report. Australia leads the way as a country that has comprehensive policies and positive results at the national and institutional levels. Austria has shown a welcome focus on gender and refugee education. Many Colombian and South African universities have successfully brought in students from under-represented groups and improved retention to ensure positive employment prospects. Finally, Vietnam has defined clear equity policy goals. It now needs to mobilize substantial resources to transform the goals into reality.

6. References

General Sources

Atherton, G., Dumangane, C., and G. Whitty (2016). <u>Charting Equity in Higher Education:</u> <u>Drawing the Global Access Map</u>. Newcastle and London: the University of Newcastle Press and Pierson.

Barros, R. P. de, Chanduvi, J. S., Ferreira, F. H. G., and J. R. Molinas Vega (2009). <u>Measuring Inequality of Opportunities in Latin America and the Caribbean</u>. Washington DC: the World Bank.

Bohonnek, A., Camilleri, A.F., Griga, D., Mühleck, K., Miklavič, K., and D. Orr (2010). <u>Evolving</u> Diversity: an Overview of Equitable Acces to Higher Education in Europe. MENON Network.

Bohnet (2016). What Works. Gender Equality by Design. Cambridge MA: Harvard University Press.

Charles, N. (2015). <u>Enseignement Supérieur et Justice Sociale – Sociologie des Expériences Etudiantes en Europe</u>. Paris: La Documentation Française.

D'Hombres, B. (2011). <u>Inequity in tertiary education systems: which metric should we use for measuring and benchmarking?</u> Washington DC: the World Bank.

 $\underline{http://siteresources.worldbank.org/EDUCATION/Resources/Inequality_tertiary_edu_systems_B}\\ \underline{eatrice.pdf}$

Ferreira, F., and J. Gignoux (2012). The Measurement of Educational Inequality: Achievement and Opportunity". Bonn: Institute for the Study of Labor (IZA). http://ftp.iza.org/dp6161.pdf

Herbaut, E., and K. Geven (2019). "What Works to Reduce Inequalities in Higher Education? – A Systematic Review of (Quasi-) Experimental Literature on Outreach and Financial Aid". Washington DC: the World Bank. Policy Research Working Paper # 8802.

 $\frac{http://documents.worldbank.org/curated/en/650601554221255443/pdf/What-Works-to-Reduce-Inequalities-in-Higher-Education-A-Systematic-Review-of-the-Quasi-Experimental-Literature-on-Outreach-and-Financial-Aid.pdf}$

Kerr, S. P., Pekkarinen, T., Sarvimäki, M., & Uusitalo, R. (2014). <u>Educational Choice and Information on Labor Market Prospects: A Randomized Field Experiment.</u> <u>http://www.demm.unimi.it/extfiles/unimidire/100601/attachment/pekkarinen.pdf</u>

OECD (2007). Tertiary Education for the Knowledge Society - OECD Thematic Review of Tertiary Education: Synthesis Report. Vol. 1. Paris: OECD.Salmi, J. (2018). All Around the World – Higher education equity policies across the globe. The Lumina Foundation. https://worldaccesshe.com/wp-content/uploads/2018/11/All-around-the-world-Higher-education-equity-policies-across-the-globe-.pdf

Orr, D., Usher, A., Atherton, G., Haj, C., and I. Ganta (2017). <u>Study on the impact of admission</u> systems on higher education outcomes. Brussels: European Commission. Report EAC-2015-0470.

Salmi, J., and A. Sursock (2018). "Access and Completion for Underserved Students: International Perspectives." Washington DC: American Council on Education.

Salmi, J. and R. Malee Bassett (2014). "The equity imperative in tertiary education: Promoting fairness and efficiency." <u>International Review of Education</u>. Volume 60, Issue 3 (2014), Page 361-377.

http://www.springer.com/alert/urltracking.do?id=L56e01c1M101bee0Sb0db3d3

Salmi, J. (2011). "The Road to Academic Excellence: Lessons of Experience." In Altbach, P. and J. Salmi (2011). The Road to Academic Excellence: the Making of World-Class Research Universities. Washington DC: the World Bank.

Thomas, V., Wang, Y., and X. Fan (2001), "Measuring education inequality: Gini coefficients of education", Policy Research Working Paper 2525, Washington DC: The World Bank.

Torgerson, C., Gascoine, L., Heaps, C., Menzies, V., and K. Younger (2014). "Higher Education access: Evidence of effectiveness of university access strategies and approaches". London: The Sutton Trust.

https://www.suttontrust.com/wp-content/uploads/2015/12/Higher-Education-Access-Report-1.pdf

UNESCO (2017). <u>Accountability in Education: Meeting Our Commitments</u>. Paris: UNESCO – Global Monitoring Report. <u>https://unesdoc.unesco.org/ark:/48223/pf0000259338</u>

University World News (2019). "Student expelled from university for being Rohingya". Reported by Al Jazeera. 21 September 2019.

https://www.universityworldnews.com/post.php?story=20190920134454609

Usher, A., and R. Burroughs (2018). <u>Targeted Free Tuition: A Global Analysis</u>. Toronto: Higher Education Strategy Associates.

https://higheredstrategy.com/wp-content/uploads/2018/09/HESA-Targeted-Free-Tuition-A-Global-Analysis-FINAL-Embargo-Sept-20-2018-1.pdf

Zhang, J. and T. Li (2002). International Inequality and Convergence in Educational Attainment, 1960-1990, Review of Development Economics, 6, 383-392.

Australia

Acil Allen Consulting (2017) Evaluation of the HEPPP. Higher Education Participation and Partnerships Program. Report to Department of Education and Training (https://docs.education.gov.au/system/files/doc/other/final heppp evaluation report 2017.03.16 0.pdf)

Australian Department of Education and Training, Higher Education Statistics, Research and Economic Group (https://www.education.gov.au/higher-education-statistics)

Australian Department of Education and Training, "Performance-Based Funding for the Commonwealth Grant Scheme"_(https://education.govcms.gov.au/performance-based-funding-commonwealth-grant-scheme-0)

Australian Department of Education and Training, Entity Resources and Planned Performance for 2018-2019

(https://docs.education.gov.au/system/files/doc/other/dept_education_and_training_budget_state ments_2018-19.pdf)

Australian Department of Education and Training, <u>"</u>Equity Research and Innovation Panel" https://www.education.gov.au/news/equity-research-and-innovation-panel

Australian Department of Education and Training, "The Higher Education Participation and Partnerships Program (HEPPP)" (https://www.education.gov.au/higher-education-participation-and-partnerships-programme-heppp)

Australian Department of Education and Training "Access and Participation" (https://www.education.gov.au/access-and-participation)

Australia Department of Education, Employment and Workplace Relations (2011) *Higher education base funding review: final report [Lomax-Smith Review]*, DEEWR, Canberra.

Australian Department of Education, Employment and Workplace Relations (2012) *Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People: Final Report* (https://docs.education.gov.au/system/files/doc/other/review_final_report_2012.pdf)

Australia Department of Education, Employment and Workplace Relations (2009) *Transforming Australia's Higher Education System* (http://vital.new.voced.edu.au/vital/access/services/Download/ngv:14895/SOURCE2)

Australia Department of Education, Employment & Training. (1990) A Fair Chance for All: national and institutional planning for equity in higher education Canberra: Australian Government Publishing Service.

"Information about requirements and procedures for higher education and VET Provisions." HEIMSHELP, Australian Government. Retrieved October 20, 2019 (https://heimshelp.education.gov.au/resources/glossary/glossaryterma4bf)

Bradley, D. et al., (2008) Review of Australian higher education: final report. Canberra: Department of Education, Employment and Workplace Relations.

Brett, Matthew & Andrew Harvey (2017) "Advancing Equity in the Australian Higher Education System" in *Visions for Australian Tertiary Education*, edited by Richard James, Sarah French and Paula Kelly Melbourne Centre for the Study of Higher Education, The University of Melbourne, pp 77-90

Chapman, B. and J. Nicholls (2013). 'HECS.' In G. Croucher, S. Marginson, A. Norton and J. Wells (eds), The Dawkins Revolution: 25 years on. Melbourne: Melbourne University Publishing.

Ey, C. (2018). The Higher Education Loan Program (HELP) and related loans: A chronology. Research Paper Series 2017–18. Canberra: Parliamentary Library.

Higgins, T. (2019). "The Higher Education Contribution Scheme: Keeping tertiary education affordable and accessible". In Luetjens, J., Mintrom, M., and P. Hart (eds). <u>Successful Public Policy: Lessons from Australia and New Zealand</u>. Canberra: ANU Press.

Government of Australia *Higher Education Support Act 2003*, No. 149, 2003. Government of Australia *Higher Education Standards Framework (Threshold Standards)* 2015,

www.legislation.gov.au/Details/F2015L01639

Government of Australia "Study Assist. Information for students about government assistance for financing tertiary education." https://www.studyassist.gov.au/help-loans/hecs-help

James, R., Karmel, T. and E. Bexley (2013). 'Participation.' In Croucher, G., Marginson, S., Norton, A., and J. Wells (eds), The Dawkins Revolution: 25 years on. Melbourne University Publishing.

Li, I. W. and Dockery, A. M. (2014). *Socio-economic Status of Schools and University Academic Performance: Implications for Australia's Higher Education Expansion*. National Centre for Student Equity in Higher Education (NCSEHE), Perth: Curtin University. (https://www.ncsehe.edu.au/wp-content/uploads/2015/01/Li-and-Dockery-Schools-SES-22-Janedited_formatted.pdf)

Martin, Lisa (2019) "University lowers entry score for female applicants in male-dominated courses." *The Guardian*. Retrieved October 27, 2019 (https://www.theguardian.com/australianews/2019/aug/29/university-makes-10-point-entry-score-adjustment-for-female-applicants)

National Centre for Student Equity in Higher Education. (2017) *Higher Education Participation and Partnerships Program: Seven Years On.* Perth: National Centre for Student Equity in Higher Education

National Center for Student Equity in Higher Education (2017) "Developing an Evaluation Framework for the Higher Education Participation and Partnerships Program" National Center for Student Equity in Higher Education (2016) "Facilitating Student Equity in Australian Higher Education" Curin University (https://www.ncsehe.edu.au/wpcontent/uploads/2016/08/Facilitating-Student-Equity-in-Australian-Higher-Education.pdf)

National Center for Student Equity in Higher Education (2017) *Annual Report June 2016-December 2017*. Curtin University (https://www.ncsehe.edu.au/wp-content/uploads/2018/04/NCSEHE_AR_2016-17_WEB_FINAL.pdf)

National Indigenous Australians Agency "Indigenous Student Success Program" (https://www.pmc.gov.au/indigenous-affairs/education/indigenous-student-success-program)

Norton, Andrew, and Ittima Cherastidtham (2018) *Mapping Australian higher education 2018*. Grattan Institute, (https://grattan.edu.au/wp-content/uploads/2018/09/907-Mapping-Australian-higher-education-2018.pdf)

O'Shea, S. (2019). 'Mind the Gap!' Exploring the post-graduation outcomes and employment mobility of individuals who are first in their family to complete a university degree. National Center for the Study of Equity in Higher Education.

Quality Indicators for Learning and Teaching (QILT) https://www.gilt.edu.au

Social Research Center (n.d.) "Gradutate Outcomes Survey" https://www.srcentre.com.au/our-research/graduate-outcomes-survey

Smith, J., Pollard, K., Robertson, K. & Shalley, F. (2018). Strengthening evaluation in Indigenous higher education contexts in Australia: 2017 Equity Fellowship Report. Perth: National Centre for Student Equity in Higher Education.

Tertiary Education Quality and Sandards Agency (TEQSA) (2017) *Guidance Note: Diversity and Equality*. Version 1.2 Australian Government. (https://www.teqsa.gov.au/latest-news/publications/guidance-note-diversity-and-equity)

Watson-Lynn, Erin (2017) "Equity is no longer an option. It's an imperative" *Higher Ed.Ition* 23 February 2017 (https://www.universitiesaustralia.edu.au/Media-and-Events/HIGHER-ED-ITION/Articles/2016-2017/Equity-is-no-longer-an-option---it-s-an-imperative)

Zacharias, N. (2017). "The Australian student Equity Programme and institutional change: paradigm shift or business as usual?" The National Centre for Student Equity in Higher Education (NCSEHE). Curtin University: Perth https://www.ncsehe.edu.au/publications/the-australian-student-equity-programme-and-institutional-change-paradigm-shift-or-business-as-usual/

Austria

Austrian Higher Education Statistics https://unidata.gv.at

European Commission/EACEA/Eurydice (2018). *The European Higher Education Area in 2018: Bologna Process Implementation Report.* Luxembourg: Publications Office of the European Union.

European Commission/EACEA/Eurydice (2019) "National Reforms in Higher Education: Austria" (https://eacea.ec.europa.eu/national-policies/eurydice/content/national-reforms-higher-education-1_en)

European Commission (2018). Education and Training Monitor 2018: Austria. https://ec.europa.eu/education/sites/education/files/document-library-docs/et-monitor-report-2018-austria_en.pdf

European Institute for Gender Equality (n.d.) "Gender Equality in Academia and Research" (https://eige.europa.eu/gender-mainstreaming/toolkits/gear/legislative-policy-backgrounds/austria)

European Council. 2009 Council conclusions of 12 May 2009 on a strategic framework for European cooperation in education and training (ET 2020)*OJ C 119*

Federal Ministry of Science, Research and Economy (2017). National strategy on the social dimension of higher education. Towards more inclusive access and wider participation. Brief Summary.

(https://bmbwf.gv.at/fileadmin/user_upload/Nationale_Strategie/National_Strategy_BF_english.pdf

Federal Ministry of Science, Research and Economy "Gender and Diversity Management" (https://bmbwf.gv.at/english/home/science-higher-education/gender-and-diversity/staff-unit-forgender-and-diversity-management/)

Federal Ministry of Science, Research and Economy, (2016) "Higher Education in Austria" Vienna (https://bmbwf.gv.at/fileadmin/user_upload/Kasparovsky/HsSystem_201602_E_BF.pdf)

Federal Ministry of Science, Research and Economy "Formalisation of Strategic Gender Equality Objectives in the Universities' Performance Agreements",

(https://bmbwf.gv.at/english/home/science-higher-education/gender-and-diversity/programmes-and-initiatives/formalisation-of-strategic-gender-equality-objectives-in-the-universities-performance-agreements/)

Orr, Dominic & Wespel, Johannes & Usher, Alex. (2014). Do changes in cost-sharing have an impact on the behaviour of students and higher education institutions? Evidence from nine case studies VOLUME II: National Reports. 10.2766/73985.

Orr, Dominic & Usher, Alex & Atherton, Graeme & Hâj, Cezar & Geanta, Irina. (2017). Study on the impact of admission systems on higher education outcomes. 10.2766/943076.

OECD (2017) *Education Policy Outlook*. *Austria*. (https://www.oecd.org/education/Education-Policy-Outlook-Country-Profile-Austria.pdf)

OeAD Österreichische Austauschdienst (2017) highlight your future. Study in Austria. Higher Education Institutions. StudyinAustria.at

(https://studyinaustria.at/fileadmin/Dokumente/oead.at/KIM/Downloadcenter/Incoming/WEB_2 0170914_HEI_2017.pdf)

Universities Austria (2019) Evaluation of the MORE Initiative of Austrian Universities uniko.at

Colombia

Bonilla, L., Bottan, N. L., & Ham, A. (2017). "Information Policies and Higher Education Choices: Experimental Evidence from Colombia". SSRN Scholarly Paper No. ID 2546835. Rochester, NY: Social Science Research Network.

Antioquia University <u>www.udea.edu.co</u>

CEDE (2017). El Programa Ser Pilo Paga: Impactos Iniciales en Equidad en el Acceso a la Educación Superior y el Desempeño Académico. Universidad de Los Andes. Facultad de Economía Centro de Estudios sobre Desarrollo Económico CEDE.

CEDE (2014). Determinantes de la deserción. Universidad de Los Andes. Facultad de Economía Centro de Estudios sobre Desarrollo Económico CEDE.

CEDE (2008). Impacto del crédito educativo sobre el acceso con equidad y permanencia en el sistema de educación superior. Universidad de Los Andes. Facultad de Economía Centro de Estudios sobre Desarrollo Económico CEDE.

EAFIT. www.eafit.edu.co

Econometria Consultores (2010) Presentación Programa Colombiano de Crédito Educativo Impactos y Factores de éxito Documento de Resultados.

Econometria Consultores (2013) Evaluación de la Estrategia de Articulación de la Educación Media con la Educación Superior y la Formación para el Trabajo.

ICETEX. https://portal.icetex.gov.co/portal

Los Andes University. https://uniandes.edu.co

MEN (2017) Anuario de la Educación Superior Colombiana

Ministry of Education https://www.mineducacion.gov.co

https://www.mininterior.gov.co/sites/default/files/decreto_762_politica_publica_garantia_de_los_derechos_sectores_sociales_lgbti.pdf

National Planning Department. https://www.dnp.gov.co

OECD (2016), Education in Colombia, Reviews of National Policies for Education, Paris. http://dx.doi.org/10.1787/9789264250604-en

SPADIES https://spadies3.mineducacion.gov.co/spadiesWeb/#/app/consultas

UAO. www.uao.edu.co

Uniminuto. www.uniminuto.edu

Valle University. https://www.univalle.edu.co

World Bank. 2012. Tertiary Education in Colombia (English). Washington DC: World Bank. http://documents.worldbank.org/curated/en/571691468018591760/Tertiary-education-in-Colombia

South Africa

Calitz, E. And J. Fourie (2016). The Historically High Cost of Tertiary Education in South Africa. Politikon. 43(1): 149-154. doi: 10.1080/02589346.2016.1155790.

Council of Higher Education (2016). <u>South African Higher Education Reviewed: Two Decades of Democracy</u>.

Dell, S. (2018). "Towards equity – Simply opening HE doors is not enough". <u>University World</u> News. 14 December 2018.

https://www.universityworldnews.com/post.php?story=20181213072636873

Department of Higher Education and Training (2019). <u>Post-School Education and Training Monitor: Macro-Indicator Trends</u>.

http://www.dhet.gov.za/SiteAssets/Post-

School%20Education%20and%20Training%20Monitor%20Report March%202019.pdf

Department of Higher Education and Training (2018). <u>Investment Trends in Post-School Education and Training in South Africa</u>.

 $\underline{\text{http://www.dhet.gov.za/Planning\%20Monitoring\%20and\%20Evaluation\%20Coordination/Investment\%20Trends\%20on\%20Post-}\\$

School%20Education%20and%20Training%20in%20South%20Africa%20-%202018.pdf

Department of Higher Education and Training (2013). White Paper for Post-Secondary Education and Training.

 $\frac{http://www.dhet.gov.za/SiteAssets/Latest\%20News/White\%20paper\%20for\%20post-school\%20education\%20and\%20training.pdf}{}$

Government of South Africa (1997). Higher Education Act.

https://www.gov.za/documents/higher-education-act

Gurgand, M., Lorenceau, A. J. S., & Mélonio, T. (2011). "Student Loans: Liquidity Constraint and Higher Education in South Africa". SSRN Scholarly Paper No. ID 1969424. Rochester, NY: Social Science Research Network.

Heher Commission (2017). Report of the Commission of Inquiry into Higher Education and Training. Pretoria: Government of South Africa.

Horn, A. (2018). Subsidizing tertiary education in South Africa. <u>Research</u>. October 2018 DOI: 10.13140/RG.2.2.17102.31047.

https://www.researchgate.net/publication/333755951_Subsidizing_tertiary_education_in_South_Africa

Kerr, A., Piraino, P., and V. Ranchhod (2017). "Estimating the Size and Impact of Affirmative Action in Undergraduate Admissions at the University of Cape Town". <u>South African Journal of Economics</u>. 14 November 2017. <u>https://doi.org/10.1111/saje.12174</u>

Naidu, E. (2018). "Universities body to probe gender imbalance at the top". <u>University World News</u>. 27 July 2018.

https://www.universityworldnews.com/post.php?story=20180725103923330

Phakgadi, P. (2019). "TUT campuses remain shut down over meal allowances" <u>News24</u>. 4 March 2019. https://www.news24.com/SouthAfrica/News/tut-campuses-remain-shut-down-over-meal-allowances-20190304

Price, M. (2013). "Affirmative Action in South African Universities: What Does Race Represent?". Oxford Human Rights Hub. 1st July 2013. https://ohrh.law.ox.ac.uk/affirmative-action-in-south-african-universities-what-does-race-represent/

Salomone, R (2019). "Court moves beyond the past in favouring English". <u>University World</u> News. 19 October 2019.

https://www.universityworldnews.com/post.php?story=20191017160303180

University of South Africa – UNISA (2016). Pretoria: Annual Report, 2016.

Valley, S., Motala, E., Hlatshwayo, M., and S. Ngcwangu (2019). "Students are protesting – again. It needn't be this way". <u>University World News</u>. 15 February 2019. https://www.universityworldnews.com/post.php?story=20190214074427250

Van der Berg, S. (2016). "Funding university studies: Who benefits?" <u>Kagisano 10</u>. Special Issue on Student Funding. Council for Higher Education. March 2016.

World Bank (2019). South Africa Economic Update: Tertiary Education enrolments must rise. Washington, D.C.: the World Bank:

Vietnam

Glewwe, P., Krutikova, S., and C. Rolleston. "Do schools reinforce or reduce learning gaps between advantaged and disadvantaged students? Evidence from Vietnam and Peru." <u>Economic development and cultural change</u> 65.4 (2017): 699-739.

Hayden, M. and P. Ly (2015), "Higher Education Access and Inclusion: Lessons from Vietnam," in Teranishi, R *et al* (eds.). <u>Mitigating Inequality: Higher Education Research, Policy, and Practice</u> in an Era of Massification and Stratification. Emerald Group Publishing Limited, pp.19-33.

Linh, V.H., and A. N. Thuy (2018). "Analysis of Access and Equity in the Vietnamese Higher Education System". <u>VNU Journal of Science: Policy and Management Studies</u>, Vol. 34, No. 4 (2018) 65-80

Linh, V.H., G. T. Long and L. V. Thuy (2010). "Equity and Access to Tertiary Education: The Case of Vietnam", unpublished.

http://site resources.worldbank.org/INTEASTASIAPACIFIC/Resources/Vietnam-Equity and Access to Tertiary Education.pdf

Ministry of Education and Training website at http://moet.gov.vn/Pages/home.aspx

World Bank (2019). <u>Policy Note on Higher Education in Vietnam</u>. Washington DC: the World Bank.

World Bank (2018). <u>Climbing the ladder: poverty reduction and shared prosperity in Vietnam</u>. Washington DC: the World Bank.

7. Annexes

7.1 Template for National Higher Education Equity Policies

1. Introduction

Presentation of the national higher education system

Main characteristics of the system (and evolution over past 10 years)

- Type and number of institutions
- Admission policies
- Enrollment rate and distribution of enrollment by type of institution (public / private), level of training, and areas of training
- Dropout and graduation rates
- Financial resources

Who is responsible for defining national policies in higher education? What are the roles and functions of the various actors involved?

- Ministry of Education with a higher education department
- Ministry of Higher Education
- Buffer Body (University Grants Council, Higher Education Commission, etc.)
- Council of University Presidents / Rectors / Vice-Chancellors
- Others (specify)

What are the current official documents defining the national higher education strategy / policies?

- National Vision
- National Strategic Plan
- White Paper
- Higher Education Law (indicate what year)
- Others (specify)

2. Diagnosis of the present equity situation

What data are available on which equity groups?

- Access (enrolment rates by type of institution)
- Success (completion rate, time to graduation)
- For gender, proportion of girls in STEM programs, proportion of women among full professors (highest academic grade in the country), proportion of women among university presidents/vice chancellors/rectors)
- Benchmarking with meaningful comparators (same region, same income level)

3. Government Equity Policy

What broad and specific equity objectives do the policy documents identify?

Which equity target groups are identified in the policy documents?

- Low-income students
- Gender groups
- Minority groups (ethnic, religion, language, geographical location, age, migration background, refugee status, etc.)
- Students with disability
- Others (please specify)

Is there a standalone policy document dedicated to equity promotion in higher education?

What specific interventions and/or instruments of equity promotion are included in the official strategy and policy documents (monetary and non-monetary)?

Does any element of the national equity policy reflect innovations coming from initiatives at the regional/local level or from any university in the country?

Does the country have an agency dedicated to equity promotion in higher education?

- What are the responsibilities of this agency?
- What are the resources of this agency?
- Proportion of higher education budget?

Monetary Policy Instruments

What are the main financial instruments to promote equity?

- No tuition fees or low fees in public institutions / No fees for certain groups / Targeted free tuition
- Needs-based scholarships and grants
- Student loans
- Others (please specify)

Non-Monetary Policy Instruments

What are the main non-monetary instruments to promote equity?

- Outreach and bridge programs
- Academic and career guidance and counseling
- Recognition of prior learning
- Reformed admission procedures
- Affirmative action programs
- Specialized institutions targeting underrepresented groups
- Retention programs
- Others (please specify)

Financial Resources

What financial resources does the country devote to equity promotion measures?

- Amount / amount per beneficiary
- Proportion of higher education budget

Quality Assurance

Do the quality assurance criteria take equity elements into consideration? In what way?

4. Results and Impact

- Who is responsible for monitoring the impact of equity promotion measures?
- What instruments, methods and data are in place to carry out the monitoring and evaluation activities?
- What evidence is there that policies, programs and measures are working (progress in access and success of various equity groups)

7.2 Template for Institutional-Level Equity Policies

1. Introduction

- Main characteristics of the institution (and evolution over past 10 years)
- Enrollment and distribution of enrollment by level and broad disciplines (according to gender and learning modality-face-to-face, distance, virtual)

2. Diagnosis of the present equity situation

What data are available on which equity groups? (socio-economic groups, rural / origin, women men, other gender, students with disability, indigenous groups, refugees, any other category?)

- Access Selectivity rate at admission, enrollment by gender, socioeconomic level, geographic origin, population group, disability, etc.
- Academic Performance Internal efficiency: rate of success by course and year, dropout rates, graduation rates according to gender, socioeconomic level, geographical origin, population groups, disability, etc.
- Additional questions on gender: proportion of girls in STEM programs, and proportion of females among full professors (highest grade of academics)

3. Institutional Equity Policy

Does the university have a formal equity policy? What documents define the equity policy? What are its main elements? What broad and specific equity objectives do the policy documents identify?

Which equity target groups are specifically identified?

- Low-income students
- Gender groups
- Minority groups (ethnic, religion, language, geographical location, age, migration background, refugee status, etc.)
- Students with disability
- Others (please specify)

What specific interventions and/or instruments of equity promotion are included in the official strategy and policy documents (monetary and non-monetary)?

Who is responsible for defining, implementing and monitoring equity measures and programs at the university?

What resources are dedicated to equity (explain by source What are the main financial instruments to promote equity?

- No tuition fees or low fees / No fees for certain groups
- Needs-based scholarships and grants
- Student loans
- Others (please specify)

What are the main non-monetary instruments to promote equity?

- Outreach and bridge programs
- Academic and career guidance and counseling
- Recognition of prior learning
- Reformed admission procedures and/or affirmative action programs
- Retention programs
- Others (please specify)

4. Results and Impact

- How does the university monitor the impact of equity promotion measures? What instruments, methods and data are in place to carry out the monitoring and evaluation activities?
- What evidence is there that policies, programs and measures are working (progress in access and success of various equity groups

5. Alignment with National Equity Policies

- To what extent are your University's equity promotion policies / measures influenced by government policies in this area?
- Are there any specific government regulations and/or incentives that help you with your equity promotion policies? Please provide detailed information.
- Are there any barriers, governmental or otherwise, that prevent you from implementing your equity promotion policies effectively?