PRIMER ON EXPANDING WOMEN'S ACCESS TO HIGHER EDUCATION

IN SUPPORT OF THE USAID HIGHER EDUCATION LEARNING AGENDA

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PREPARED BY

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COVER PHOTO

Santiago de los Caballeros, Dominican Republic - October 21, 2021: A graduate of the USAID-supported pre-college preparation program helps a current participant in the program fill out a survey during the presentation of the program at her high school. Previous students who passed through the program serve as ambassadors to encourage current high school students to participate in the program and consider applying to college. This youth-to-youth connection provides an often-lacking role model for students and increases the chances they will pursue higher education.
Photo Credit: Tony Núñez, Photographer, ISA University

CONTENTS

ACRONYMS

GBV   Gender-Based Violence

HEI   Higher Education Institution

ICT   Information and Communication Technology

LMIC   Lower- and Middle-Income Countries

STEM   Science, Technology, Engineering, and Mathematics

TVET   Technical and Vocational Education and Training

USAID   U.S. Agency for International Development

1. INTRODUCTION

This document supports <u>USAID's Higher Education Learning Agenda</u> and the goals of <u>USAID's Higher Education Program Framework</u>.[i] Shown, in part, in Figure 1, the framework captures the tripartite mission of higher education systems. This primer presents learning to strengthen evidence-based activity implementation in order to assist USAID Missions, implementing partners, and other practitioners in supporting higher education programming and in collaboration with the private sector.

This primer captures key considerations under Question 9 of the ten learning questions of the USAID Higher Education Learning Agenda: *"How can higher education access, retention, and completion rates be improved for underrepresented populations?"* This learning agenda question is multi-dimensional, therefore, this primer focuses on the question in the context of *women's* access, retention, and completion in higher education.

Figure 1: USAID's Higher Education Program Framework

TABLE 1.   USAID Higher Education Learning Agenda Questions and Themes

NO.	QUESTION
1	How can higher education systems and institutions become more strategic in planning, implementing, and monitoring core activities (e.g., enrollment, academic programs, research, and outreach)?
2	How can financing of higher education systems and institutions become more sustainable?
3	How can the viability and effectiveness of online and other forms of distance education be improved?
4	How can skills or competencies (e.g., technical and soft skills) for employability best be identified, analyzed, and incorporated into curricula, teaching, and learning?
5	How can the practice and culture of teaching become more learner-centered?
6	How can higher education systems and higher education institutions (HEIs) play a more active role in developing and strengthening national and regional innovation ecosystems?
7	How can HEIs collaborate more effectively with the private sector to enhance the relevance and quality of teaching and learning, and research and innovation?
8	How can USAID best partner with HEIs to make use of local knowledge and expertise?

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[i] USAID Higher Education Program Framework: <u>Edu-links.org</u>

9	How can higher education access, retention, and completion rates be improved for underrepresented populations (e.g., women, indigenous and marginalized populations, and people with disabilities)?
10	What institutional and behavioral changes are needed to improve gender awareness and gender equity?

2. BACKGROUND

This primer explores the barriers women face in accessing and staying in higher education, particularly in regions in the world where men outnumber women in higher education, namely sub-Saharan Africa and South Asia.[90] The primer explores strategies for improving women's access, retention, and completion to higher education.

It must be acknowledged that women are not underrepresented in higher education in all parts of the world; in fact, in 103 countries women either equal or exceed the enrollment of men in higher education.[90,76] However, even within countries where women appear to have equal access to higher education as men, it is important to look beyond national-level data as this can hide how certain groups of women continue to face barriers to accessing higher education.[27]

It must also be acknowledged that there are other underrepresented populations in higher education besides women. Groups such as the lesbian, gay, bisexual, transexual, and intersex plus community, ethnic minorities, people affected by conflict, and people with disabilities also have challenges accessing higher education, although more research is needed to better understand those dimensions. The barriers these underrepresented groups face are exacerbated among women. This intersectionality will be discussed in this primer when possible.

For the purpose of this primer, *higher education* refers to a range of both university and non-university institutions (teacher training colleges, community colleges, technical institutes, polytechnics, distance learning programs, and academically linked research centers) within a diversified post-secondary education. *Access* can be defined as having been accepted to and enrolled in a higher education institute (HEI). *Retention* is the act of remaining enrolled and attending courses from semester to semester, but does not necessarily refer to success in passing courses. *Completion* refers to successfully completing all required courses and obtaining a degree or certificate from an HEI. *Equitable access* is commonly defined as "the ability of people from all backgrounds to access higher education on a reasonably equal basis," but also be adequately prepared and equipped for higher education.[8,87]

3. WOMEN'S ACCESS TO HIGHER EDUCATION

There is a growing global demand for higher education due to economic development, rise in middle-class aspirations, and population growth.[1,37,60,73] However, limited spaces in HEIs compounded by a growing demand may have serious consequences for employment prospects. HEIs cannot keep up with the changing economies.[4] In addition, access to higher education is far from equitable, although there have been some efforts on the part of HEIs to improve.[90] Women's access to higher education is a complex topic, and this primer is a summary of what the literature presents to date on this topic.

Where is Women's Access to Higher Education Lagging Behind Men's Access?

Women's enrollment in higher education has tripled globally between 1995 and 2018.[75,90] However, in countries where men outnumber women, the sex gap in access to higher education has declined little in recent decades.[80]

Data from 2021 indicate that Middle Eastern and North African countries are nearing parity between men and women's enrollment in higher education.[91] With a few exceptions, sub-Saharan African countries have the lowest gender parity index in the world, with gaps of as much as 73 women enrolled for every 100 men.[80,90] Figure 2 indicates where women lagged behind men in enrollment in higher education in 2016.
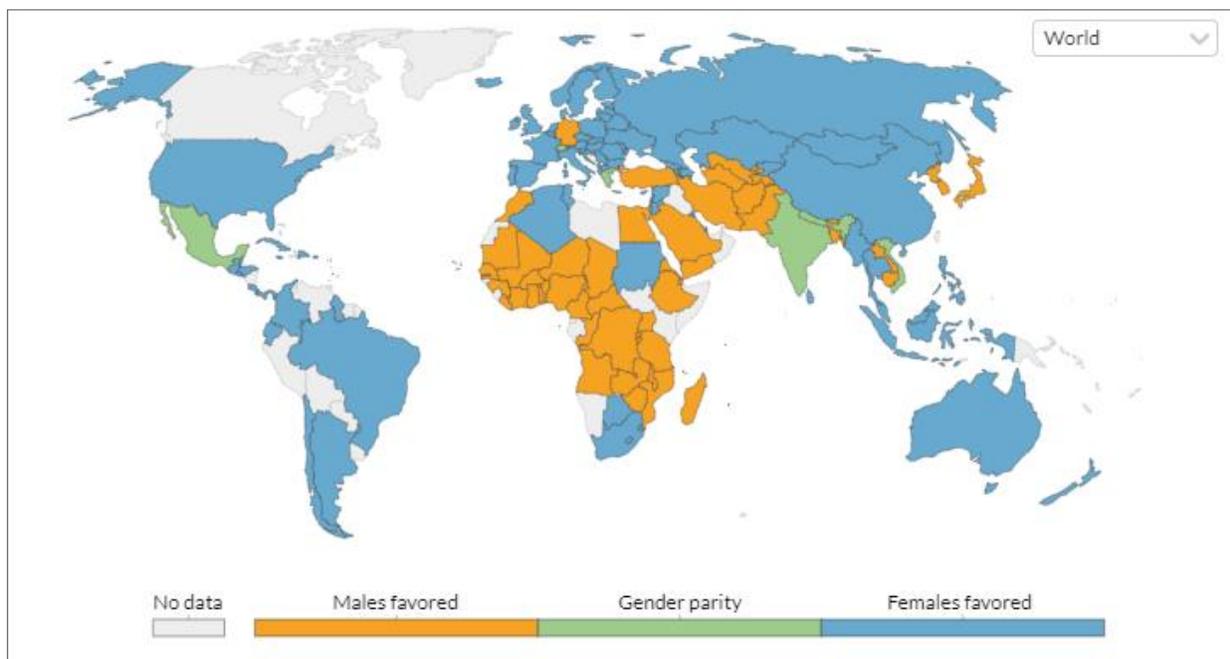

Figure 2: Max Roser and Esteban Ortiz-Ospina (2013) - "Tertiary Education." Retrieved from:
https://ourworldindata.org/tertiary-education

4. PREDICTORS OF WOMEN'S ACCESS TO HIGHER EDUCATION

This section summarizes the evidence on what the *predictors* of women's access to higher education are, or what factors make it more or less likely that women will attend an HEI, focusing on countries where men outnumber women in these institutions. Speaking of predictors rather than barriers is meant to frame the problem as systemic and multifaceted. Specific barriers should be studied at the country and regional levels. Women cannot be thought of as a homogenous group with the same experiences, nor are higher education systems homogenous. Within a country, it is important to consider the type of HEI (public or private; technical school, two-year college, or university, etc.), as well as other factors such as location (e.g., are HEIs only in the capital city, or are they dispersed throughout the country), and tuition and related costs. It is equally important to consider how sex intersects with other aspects of identity, such as ethnicity, disability, religion, socioeconomic status, geographic location, gender identity, gender expression, and sexual orientation, and whether regions or populations have been affected by conflict.

The five sections below are a discussion of the factors, identified by a review of the literature, most associated with women's access to higher education, as well as a section on women in science, technology, engineering, and mathematics (STEM) fields.

Socioeconomic Background

There is an abundance of evidence that the biggest predictor of access to higher education, for both men and women, is socioeconomic background.[8,17,27,28,55,88,90] Although access to higher education has increased overall, the gap between the wealthiest and the poorest has widened in most countries.[90] In 2018, 10 percent of the population with the lowest income worldwide had access to higher education compared to 77 percent of the wealthy population.[73]

When considering how socioeconomic background intersects with sex, the evidence is mixed. In a longitudinal study of four countries, women from the poorest quartile in Vietnam and India were more likely than men of the same quartile to access higher education, but the reverse was true in Peru and Ethiopia.[56] There is evidence from other countries that when household income is limited, there is a preference to invest in young men's higher education,[51,88] which is consistent with the literature on girls' access to primary and secondary school. However, the gender and socioeconomic inequalities experienced earlier in the education cycle cannot be discounted as a contributor to access to higher education.

As to whether tuition cost alone is more of a barrier for women than for men, that is also unclear. Amid rising tuition worldwide, women's enrollment in higher education has, on average, tripled globally, a rate greater than men's.[5,90] The global gender parity index[ii] was 0.73 in 1970, and is currently 1.13, but gains in gender parity have been more modest in lower and middle income countries (0.68 to 0.78 in sub-Saharan Africa during the same time period).[91] However, global figures mask the issues within specific countries, and this would need further investigation. It is important to note that the cost of attending a higher education institution goes beyond tuition, such as entrance exams, housing, food, transportation, books, medical costs, library fees, Internet, and study group fees. Some programs also require funding for specialized equipment (such in science, technology, engineering, and mathematics or STEM fields), field work, and research.[43,71,88] In addition to direct costs, there are also opportunity costs of spending years out of employment or having to defer wages to pay for their living expenses.[22,48] Women also bear some additional costs, such as feminine hygiene products.[43]

> ✓ **FAST FACT:** In Africa, 20 percent of women, versus 35 percent of men had access to the Internet in 2020. In the same year, 56 percent of women and 68 percent of men in Arab countries had access to the Internet.[32]

Primary and Secondary School Education

Women's access to higher education is largely affected by access to and quality of basic education. In sub-Saharan Africa and much of the world, the pool of eligible women for higher education is simply

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[ii] The Gender Parity Index is a socioeconomic index usually designed to measure the relative access to education of males and females.

smaller than the pool of eligible men because fewer women than men complete secondary school.[iii] In 2018, girls made up 75 percent of unenrolled primary school-age children, and nearly half of those girls were in sub-Saharan Africa.[8]

Interestingly, in low-income countries, there is more gender parity in higher education than at the secondary level.[90] The gender parity index is smaller in secondary school than in higher education in Cameroon, Zambia, Pakistan, and Iraq; in Qatar and Saudi Arabia, the proportion of women is lower in secondary, but higher in higher education, when compared to men.[91] Setting aside sheer numbers, the quality of basic education is a predictor of access to higher education, as well as retention and completion.

There are two important aspects of how basic education prepares students to transition to higher education: 1) academic readiness, which is the acquisition of the competencies needed to succeed in higher education; and 2) personal preparedness, which includes informing students of how to apply to HEIs (e.g., requirements, costs, entrance exams), but can also mean helping them to access financing and scholarships, as well as helping them to mentally and emotionally prepare for a new environment.

A poor quality of primary and secondary education reduces the chances of accessing higher education.[48] Acquisition of literacy and numeracy in early primary school is predictive of later performance in higher education.[27] The quality of the secondary school is predictive of access and completion of higher education. It is difficult to determine whether it is the prestige of the school, preparation for a higher education entrance exam, or some other factor that contributes to the transition to higher education. As an example, a study in Ghana estimated more than 70 percent of the future doctors, scientists, engineers, architects, pharmacists, and other professionals graduating from HEIs came from only 18 of the country's 504 senior secondary schools.[17] A deeper understanding of HEIs' selection process and secondary school quality at a country- or even HEI-level will help isolate how to expand equitable access.

It is very difficult to tease apart the quality of primary and secondary school education with socioeconomic status. Students from rural areas and from the most under-resourced districts have limited access to quality basic education, which limits their chances of accessing and achieving at HEIs.[17,46] In at least 20 low and low middle-income countries, the Global Education Monitoring Report notes that "hardly any" poor, rural young women complete upper secondary school.[71] For example, a study in Turkey found that low-income students have a harder time competing on entrance exams with applicants who have more resources to spend on private tutoring and exam preparation.[6]

Secondary schools vary in terms of how well they prepare students to seek higher education. Disadvantaged students lack information about the cost of post-secondary education and lack the guidance and support they need to prepare for post-secondary education, employment prospects, and existing financial aid schemes.[22] A qualitative study on factors that contribute to rural women's access to higher education indicates that what was most lacking in secondary school was guidance about the application process and what to expect in university.[43]

[iii] The secondary school global gross enrollment rate for women is 75.918, but reliable sex disaggregated completion rates are scarce. Source: https://data.worldbank.org/indicator/SE.SEC.ENRR.FE?name_desc=false

Parental Education and Parents' Level of Support for Women's Higher Education

There is much research that indicates that the educational level of parents is one of the strongest predictors of both access to higher education and degree completion.[62,81] For example, in Kenya, it is estimated that roughly half of respondents with university-educated fathers go on to attend university, compared to 1 percent of those with fathers who did not complete primary school.[63]

That said, according to the 2020 Gender Education Monitoring report, children's education relies less and less on the education of their parents, although girls' years of schooling are still more aligned to their parents' than boys', and particularly to that of their mothers.[71] This suggests that there is social mobility and a perceived value for higher education. However, this perception may be tenuous; in 82 percent of low-income countries and in 70 percent of lower-middle-income countries with data, the unemployment rate is higher for those with an advanced educational level than for those with only a basic educational level.[30]

Beyond parental education, parental support greatly increases the chances children, especially girls, will access higher education.[43,50] However, parents who did not attend an HEI may be less likely to be able to help their children through the steps of enrolling, such as reminding them to read through brochures, helping them to make strategic choices when applying, or taking them on campus visits.[22] Parents also have a great influence on students' choices of study, especially for women.[88]

Distance to HEIs

The location of one's residence is a major predictor of access to higher education; those living in urban settings are twice or more likely to attend an HEI than those in rural settings.[15,17] One cannot isolate the sheer distance to an HEI as a barrier without considering several other socioeconomic factors, including primary and secondary education quality in rural areas[46] and the relatively lower wealth of those living in rural areas,[8] as well as the fact that parents' education levels are typically lower in rural areas.[8]

Sex also intersects with the rural/urban divide, as women from rural areas are less likely than men from rural areas to access higher education.[88] Women have the additional concern of safety when moving far from family, including a lack of adequate on-campus dormitories for women and unsafe urban environments.[17,39,88]

Safety is also a major barrier to women's *retention* in and *completion* of higher education; it is also possible that women's fear and/or their parents' fear of potential violence in an HEI environment may be a specific barrier. This is another area to be investigated further.

Gender Roles and Norms

For women who live in societies, communities, and families in which there is adherence to rigid gender roles and norms, access to education may be limited—starting with primary school and becoming increasingly so at secondary and higher education levels. Societal norms in gender roles might dictate that women tend to familial and household responsibilities, get married—often at an age that conflicts with higher education—and heed their parents' plans for their future.[39,43,88] These roles and norms present a barrier for many women to access higher education, especially if other factors are at play, such as relative wealth, education of parents, and living in a rural setting.

Investing in a girl's higher education may not be perceived to be worthwhile because in some traditional cultures, women leave their families after marriage, whereas many men are expected to continue to provide for their parents.[45,88] Even when parents are supportive of education, marriage may still be a priority for many parents and girls themselves, which may not only affect whether they access higher education, but the type of degree and length of program.[50,88]

Once women are married, they may lack the autonomy to decide whether to attend higher education because of cost and expectations to start a family.[88]

5. WOMEN'S ACCESS TO HIGHER EDUCATION VARIES BASED ON THE QUALITY OF HEI AND CHOICE OF FIELD OF STUDY

Despite the fact that there are more HEIs around the globe now than ever before,[37,70,72] the hierarchy of prestige and quality means that disadvantaged students are often confined to lower-ranked institutions.[48,70] In many cases, gender disparity is magnified at higher quality and prestigious institutions.[8,46]

Globally, men outnumber women in science and technology fields in all countries,[90] with approximately 28 percent of STEM professions held by women.[77] In addition, women in nearly every country in the world[iv] are much less likely than men to pursue STEM subjects as fields of study in higher education.[8,28,80,88]

Globally, the percentage of women studying engineering, manufacturing and construction, or information and communications technology (ICT) is below 25 percent in more than two-thirds of countries, and the share of female enrollment in technical and vocational education and training (TVET) declined from 45 percent in 1995 to 42 percent in 2018.[70]

Women's choice of studies is often influenced by gender roles, norms, and stereotypes, such as the perception of STEM as a male discipline.[80,v] Stereotypes, such as the belief that women either have lesser or different intellectual abilities, influence women's choice of study, but it also makes it less likely they will be encouraged to pursue STEM studies.[13] For example, a study revealed that Ethiopian university officials deter women from studying the hard sciences, imagining that this strategy will help to minimize the dropout rate for women.[14] Likely due to persistent stereotypes and discouragement, women globally tend to have a lower self-efficacy compared to men, particularly concerning STEM subjects.[13,14]

As with predictors of women's access to higher education in general, many of the same factors, such as gender norms, parents' encouragement, and secondary school preparedness, predict whether women will pursue STEM fields.[8,88] In addition, STEM curricula are especially gender-biased, in that women are largely absent from the examples and illustrations in math and science curricula. Teaching practices in STEM fields also tend to be a teacher-centered and male-dominated style of teaching (authoritarian,

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[iv] Women outnumber men in STEM professions in Lithuania, Bulgaria, Latvia, Portugal, Denmark, and Norway. https://www.weforum.org/agenda/2019/03/gender-equality-in-stem-is-possible/. Gender gaps are sometimes smaller in gender inequitable and Muslim countries, called the "STEM Paradox," such as in Iran, Uzbekistan, Saudi Arabia, Oman, Tunisia, Malaysia, and Jordan. https://engineering.purdue.edu/ENE/News/the-stem-paradox-why-are-muslimmajority-countries-producing-so-many-female-engineers
[v] Even for women who obtain a degree in a STEM field, their opportunities to find jobs are subject to the same gender stereotypes that operate in the labor market.

rigid, impersonal, assertive, and aggressive), which may negatively affect women's inclination toward STEM.[14] There is also a heavy underrepresentation of female professors and researchers in STEM.[8,28,46]

6. A NEED FOR GREATER FOCUS ON WOMEN'S *RETENTION* IN AND *COMPLETION* OF HIGHER EDUCATION

Women's access to higher education is an important concern, but only after actual completion of degrees will women have access to higher-paid job markets and be in a significantly better economic position—for many people the ultimate goal of higher education. However, data is meager on retention and completion. A meta-analysis of 75 impact studies in LMICs showed that most focused on access only.[22] There is some evidence that even when women gain access to higher education, they tend to have lower completion rates.[72] Disaggregated data and rigorous research on retention and completion is needed to better understand how women fare.

The first year at an HEI is the most difficult, as students have to adjust to the rigor of academic study, peers from different backgrounds, new financial concerns, safety concerns, and navigating an new environment, which may be especially challenging for students from rural settings coming to urban centers.[66] Many women from rural communities struggle with the "culture shock" of higher education life, as well as complicated feelings about the situation they have left behind at home.[64] Due to this transition, student attrition rates are higher as students move from their first year to the second year of studies when compared to the second year and third year studies, and this is especially so for women.[50]

Many of the factors that affect women's *access* to education also affect retention and completion, including cost and gender norms that put pressure on women to prioritize familial responsibilities and to find a husband and start a family.[51,88] It is often the case that students are not academically prepared, but it is unclear whether this is a specific barrier for women. It is a barrier for any students who did not have access to a quality secondary school. It may be that women are less academically prepared than men, but this would have to be studied.

There are other factors that uniquely affect women's retention and completion, namely gendered spaces, gender norms, and gender discrimination; gender-based violence; gender-biased curricula and pedagogy; and a lack of women role models and decision-makers.

Gendered Spaces, Gender Norms, and Gender Discrimination

HEIs are not neutral sites isolated from society, but reflect the same gendered power dynamics, practices, and norms that discriminate against women in general.[2,43,88] Some women describe higher education spaces that are male-dominated, and sometimes even hostile toward women, including classrooms, dining halls, residence halls (which can be mixed-sex), campus grounds, and religious associations.[59,88] Some women report that male students and professors treat them as subordinate, fragile, "dependent on male protection and requiring surveillance and control of their behavior," and worse, make subtle jokes and inappropriate sexual remarks that make them feel uncomfortable.[88] In addition, instructors and faculty members sometimes demonstrate their prejudice about women's academic abilities and intellectual authority, which affects women's self-esteem.[88]

Gender-Based Violence

There is a plethora of qualitative research and anecdotal reporting that supports the notion that gender-based violence (GBV) in the form of sexual harassment, sexual assault, and sexual coercion are common in HEIs worldwide. This has been shown to contribute to women's irregular attendance, poor performance, and low self-esteem.[8,43,46,59,88] Even the threat of violence and harassment marks a space as male, and silences and intimidates women.[88] Women fear sexual harassment when they travel to and from school, live away from home, conduct fieldwork, attend classes with mostly men, or study under male instructors.[88]

There is also qualitative research and anecdotal reporting that it is not uncommon for male faculty to prey on women, offering or sometimes requiring sex for grades and opportunities or for promises of financial resources (including housing, tuition, and books).[43,88] Besides trapping women in relationships that may be unsafe and exploitive, these relationships result in the discounting of women's accomplishments based on the assumption that their success was not related to their own academic merit.[46,88] Many women don't report transactional sex or other forms of GBV for fear of not being believed, reprisal, punishment, or ridicule.[88] However, localized studies of female university studies suggest rates might be alarmingly high: 58.8 percent in northern Nigeria,[29] 25.2 percent in Ekiti State, Southwestern Nigeria,[49] 57.8 percent in Eastern Cape, South Africa,[3] and 94 percent across Zimbabwe.[61]

Gender-Biased Curricula and Pedagogy

Curriculum and pedagogy are often gender-biased, reflecting the underlying gender norms and stereotypes of the institution and wider society. Gender-biased curricula and pedagogical practices are especially manifested in STEM fields, in that the contribution of women scholars and texts published by women intellectuals are underrepresented.[59,88] Women may feel unwelcome or lack confidence in their studies if they do not see their voices represented in the pedagogical and curricular content.[88]

As mentioned above, male professors' interactions with female students manifest their negative gender stereotypes, in either subtle or overt ways. This also influences the performance and confidence of women, especially in the STEM fields.[88]

Limited Women Role Models and Decision Makers

Men faculty outnumber women faculty in HEIs in nearly all countries in the world. For example, only 24 percent of academic staff in higher education across sub-Saharan Africa are women.[12] Women are even more underrepresented as senior faculty and in decision-making bodies in many countries.[71] The underrepresentation of women reflects the historically lower access to all levels of education, but it also reflects HEI's priority to recruit women. Conventional faculty recruitment places value on full-time, uninterrupted academic trajectories, whereas women are more likely to be disadvantaged by norms that fail to recognize competing commitments, such as care responsibilities.[71]

There is some evidence that the lack of representation of women in higher education affects female students' performance and retention, especially in STEM-related subjects.[80]

As HEIs increasingly attract more women, dismantling gender norms and making the environment more gender equitable must be done intentionally. Increasing women faculty and decision-makers is a step toward that goal.

7. WHAT WORKS IN EXPANDING WOMEN'S ACCESS, RETENTION, AND COMPLETION IN HIGHER EDUCATION

Techniques to expand women's access to, retention in, and completion of higher education must be considered in light of specific contexts and disaggregated data. As there is no "single barrier" for women in higher education, it is important to note that no single approach will achieve results. Approaches must go beyond access, and focus on retention, completion, and quality. Approaches should be multifaceted and based on a deep understanding of the context. Finally, approaches should go beyond gender, improving equity and inclusion in a broader inclusion framework.

Early Intervention to Improve Women's Access, Retention, and Completion

As inequities begin in secondary and even primary school, it is important to intervene early.[17,27,80] Evidence from developed countries, and some developing countries, confirms that sustained investment throughout the education cycle is necessary to improve access, retention, and completion for the most marginalized groups, including women.[27,82] In addition to investing in the quality of primary and secondary education with higher education in sight, it is important to supplement basic education programming with career guidance, counseling, and mentorship, especially for women and other marginalized groups.[50,72]

Intervening early is especially important to increase the number of women who pursue STEM or TVET fields, as many countries require that students select their academic tracks, such as languages, mathematics, sciences, applied sciences, humanities, creative arts, and technical subjects, in upper secondary school. The number and type of tracks differ by country, but some tracks selected in secondary school may preclude students from accessing certain types of universities or certain fields of study. For example, it would be nearly impossible for a languages track student in secondary school to select a STEM field at an HEI. Girls are less likely than boys to choose STEM subjects in secondary school, so by the time they reach higher education, it is often too late.

Early intervention is necessary, but not sufficient for women's access to higher education and for women's selection of STEM fields. It has been shown that HEIs show more success in recruiting women in STEM/TVET programs if they are targeted in secondary schools, and if the school helps to make STEM relatable to the real world and to career prospects.[13,18,52] Other successful interventions to increase young women's awareness and enthusiasm for pursuing STEM fields include requiring all secondary students to take some STEM courses, career orientation "to deconstruct misconstrued images of STEM and their biased connection to gender stereotypes," exposure visits to STEM labs, and hearing from a professional, preferably a woman, working in a STEM field.[13,52,80] In addition, teacher education colleges should be equipped with gender-responsive pedagogy, especially with regards to mathematics and science, in order to break the cycle of inequitable instruction.[52]

Support Policies that Promote Equitable and Affordable Access to HEIs

The following policies have been shown to be effective in improving women's higher education access, retention, or completion.

a) Affirmative action policies to improve women's access

Affirmative action is the most commonly cited approach to improve equitable access to higher education. Affirmative action is a set of laws, policies, guidelines, and administrative practices granting special consideration to historically excluded groups, specifically racial minorities or women. Affirmative action emphasizes "targeted goals" to address past discrimination in a particular institution or in broader society through "good-faith efforts to identify, select, and train potentially qualified minorities and women."[16] Affirmative action policies may include one or several of the following: targeted recruitment, quotas, HEI outreach and bridging programs with secondary schools, and reformed admission procedures (e.g., extra points on entrance examinations, lowering the cut-off score).[8,72] Although financial incentives such as gender-based scholarships, stipends, and grants may be considered an affirmative action, they will be discussed separately.

Affirmative action policies are oftentimes criticized for lowered standards and quality, accepting students that are academically unprepared, or not targeting the students that really need it the most.[70] There is also reported backlash and stigmatization against recipients of affirmative action, as they are perceived to have been given an opportunity that they do not deserve.[88]

A systematic review of affirmative action programs commissioned by the Australia Aid Agency and the U.K Department for International Development, as well as the considerable documents reviewed for this primer, indicated positive results of affirmative action, including increased access to higher education for targeted groups (such as women). Very few suggested that these policies have negative impacts on the quality of higher education.[8,72,73] However, there was some evidence that students admitted under affirmative action were often less academically prepared relative to their traditionally admitted peers.[48] Thus it is important to put in place interventions to support those vulnerable students. Some affirmative actions, such as quota policies, may offer chances to women and vulnerable groups that they would not have had otherwise, but ultimately, they are working within the constraints of availability. They provide a fairer allocation of those places that are available, but do not ensure sufficient places.[48]

The available research on affirmative action concludes that it does increase equitable access to higher education, including for women. However, the following points are important to consider:[8,70,72,82]

- Ensure a holistic view of equitable access, as policies can increase access to higher education for the targeted groups, but in doing so may exclude other disadvantaged groups.

- Consider diversity, as well as equitable policies, by targeting groups such as older students, different geographic locations, and students who did not complete their degree.

- Offer financial aid schemes for those in need, increasing both accessibility and *affordability*.

- Provide ongoing pedagogical support, including pre-entry programs and job placement mentoring.

- Target the most vulnerable groups based on the local context (i.e., women from rural areas, women with disabilities, etc.).

- Design strategies to improve retention and completion rates, based on barriers specific to the most vulnerable groups.

- Governments must employ monitoring and compliance authorities,[vi] commissions, and agencies to ensure fairness and accountability.

b) Flexible course arrangements and technology to improve women's access, retention, and completion

Women and vulnerable students who need to work, reside far from an HEI, have mobility constraints or health risks, or have familial responsibilities may benefit from a non-traditional course arrangement such as distance education, part-time schemes and/or flexible courses, or a hybrid form of these options.[82]

In many developing countries, distance education is seen as essential to reach some types of vulnerable students as well as meet the high demand for higher education in an affordable way. In some instances, it has been shown equivalent outcomes to traditional higher education.[8] Part-time schemes have been shown to increase retention of women who have increasing marital demands, poor economic or financial base, or lack of encouragement from employers or a spouse.[8]

However, many consider distance education a "second-class option," and it is often seen as less valuable on the job market.[8,82] Thus ensuring the standards are comparable to traditional face-to-face courses will be important so that inequalities do not follow women in higher education and in the job market.

Many of the most vulnerable students lack the technology and connectivity required to access distance learning, so it will be important to leverage appropriate technology, such as computers, mobile phones, and a stable Internet connection to provide access to the most vulnerable.[73]

Even with face-to-face courses, improving access to computers and the Internet is one of the best ways of increasing student retention, especially for low-income students, as many courses require online assignments, email for announcements, downloaded learning and research materials, and interaction with their classmates online.[50] Higher education students also need their own computer, as computer labs are often either nonexistent or may be inaccessible when students need it.[33] Finally, all higher education students, regardless of field of study, need training in digital literacy, as these courses are typically reserved for TVET or computer science students.[33]

> ✓ **FAST FACT:** Only a few well-connected African countries like Kenya, Mauritius, Morocco, Nigeria, Seychelles, South Africa, and Tunisia attained a connectivity level of around half of the population as of 2017. These countries also lead Africa in utilizing the Internet for education.[26]

For more information Online Learning in Higher Education, consult: <u>What Works in Online Learning in Higher Education (edu-links.org).</u>

[vi] Monitoring and compliance authorities are tasked with ensuring that institutions meet their regulatory and internal process obligations.

> **SPOTLIGHT: Career Girls Mobile Learning Center, a STEM pilot program in Rwanda[7]**
> In 2019, Career Girls, a non-profit organization that provides girls with career exploration resources through professional female role models in STEM fields, in partnership with a Rwandan social enterprise called Starlight Africa, launched a one-month pilot program in Rwanda. One hundred young women between the ages of 10 to 17 from two schools participated in the pilot program, Career Girls Mobile Learning Center. Interactive curriculum and lesson plans explained and encouraged careers that are male-dominated such as those in ICT, health, science, arts, and communications. To meet the barrier of limited Internet access and technology, the program used low-cost, offline technology. The curriculum also encompassed soft skills such as teamwork, overcoming obstacles, building confidence, and reinforcing positive life values in conjunction with short videos featuring female African role models. By incorporating various mediums, the pilot program helped young girls envision non-traditional careers and educational opportunities to address local challenges in their communities.

> **SPOTLIGHT: Expanding Access Through Distance Learning, A Case in Rural Kenya[39]**
> Kenyatta University, with the technological expertise of Kenya Education Network, and in a partnership with the Ford Foundation, implemented an e-learning program for women in one of Kenya's most remote regions. Marsabit Open Learning Centre for Women aimed to increase the number of female secondary school teachers in a remote region of Kenya that traditionally had very few. The program provided rural women with tertiary education in teacher training through a distance learning platform. All course materials were provided in electronic modules and then distributed to students, and women were not required to travel to Kenyatta University for their training. The pilot program was deemed a success, doubling the number of women secondary school teachers in the region. Additionally, sustainability of the online learning center was ensured by the Higher Education Loans Board, which set up a revolving fund to allow students opportunities to access distance learning over the next decade.

c) Gender mainstreaming to improve women's retention and completion

Gender mainstreaming is the process of assessing the gender implications of any planned action, including legislation, policies, or programs, in all areas and at all levels. It is a strategy for making gender-related concerns and experiences an integral part of the design, implementation, monitoring, and evaluation of all legislation, policies, and programs so that all genders benefit equally and inequality is not perpetuated.[31] Gender mainstreaming policies can be employed to ensure HEIs are responsive to the many barriers to retention and learning that disproportionately affect women, including addressing GBV in HEIs.[89]

Gender mainstreaming must be holistic, multifaceted, based on local context, and comprehensive in scope. Policies and interventions may include:

* Gender-sensitization workshops for students, faculty, and administrators;

* Mechanisms to monitor and enforce existing policies;

* Sexual harassment policies and hotlines;

* Gender committees and point persons within the institution;

* Leadership and mentoring opportunities for women;

* Policies to increase the number of women students and faculty;

* Mainstreaming gender in the curriculum; and

* The provision of services and infrastructure such as women's centers, child-care services, campus housing, and appropriate fieldwork accommodations and transportation.[88]

One-off gender training workshops or smaller-scoped interventions may make some students and faculty more aware of gender discrimination, but will be unlikely to dismantle gender norms and transform the culture of higher education systems and HEIs as required to improve women's retention and completion.[39,88] However, even when clear gender policies exist, implementation, monitoring, and enforcement must be planned with a transparent accountability structure.[88]

To this end, higher education systems and institutions must implement gender mainstreaming based on their gender equality status. This work presents a process composed of a set of phases and instruments that allows the institution to detect points of improvement in the processes of making higher education an equitable environment.[19]

For more information on gender mainstreaming in Higher Education, consult: INASP Gender Mainstreaming in Higher Education Toolkit or Technologies for African Agricultural Transformation Gender Mainstreaming Guide.

d) Increase women academic and research professors to improve women's access and retention

Increasing women faculty may not only transform higher education from a male-dominated space to a more gender equitable one, it may also encourage more women to pursue higher education. Although there is a lack of research making a direct link, the lack of women role models is often cited as a barrier to women's access to HE.[88]

Some of the ways through which to increase women in academia is to focus on women's retention and completion so there are more women higher education graduates, affirmative action for women faculty, flexible work arrangements, and non-discrimination policies for the workplace.[52,80] To promote more women in leadership positions, women also need mentors and skill building in communication and leadership.[80]

Increase Affordability for the Most Socioeconomically Vulnerable

Making higher education more affordable for the most socioeconomically vulnerable, including women, can increase access and retention. However, it is important to not conflate economic vulnerabilities with gender-based vulnerabilities. Thus, any funding scheme to increase women's access to higher education must be paired with other interventions, based on a holistic view of vulnerability and a thorough understanding of the context. There are several different financing schemes that vary in terms of how well they work in improving access and retention, from context to context. Each is discussed below.

a) Scholarships

Scholarships (awarded based on financial need or academic achievements, extracurricular activities, or field of study) can be especially successful in addressing both affordability and accessibility.[72] Scholarships have been especially successful in getting more women in STEM fields, as was the case with a successful USAID STEM in higher education program in Liberia.[83] It is important, however, to pair grants and scholarships with a combination of other policies and interventions, such as affirmative action, outreach and bridging programs with secondary schools, reformed admission procedures, and a retention program to improve completion rates, among others, and that these approaches be based on a deep understanding of the context.[71,73,74,88]

Research suggests that even equitable funding schemes combined with affirmative action programs alone will not combat gender discrimination and change gender norms in HEIs. Thus, a more holistic approach that includes gender mainstreaming will be more successful in the long run.[83,88]

Nonetheless, cost is a major barrier, and grants and scholarships can make a significant contribution to improving equitable access to higher education. As such, below are some guidelines from USAID's Higher Education Scholarship Toolkit for designing a grant or scholarship program:[86]

- Seek diverse perspectives at the outset of programming such as host country higher education and gender experts, women scholarship alumni, and women leadership in host country HEIs.

- Consider financial support for students' dependents, such as children and elders.

- Diversify access to grant and scholarship information, ensuring both paper and online application materials, and ensuring multiple platforms for advertisements, such as paper-based fliers, social media, websites, SMS texts, and even radio advertisements.

For more information on designing, implementing and managing USAID Higher Education Scholarship programming, consult the USAID Higher Education Scholarship Toolkit.

b) Free tuition

Free tuition is a funding scheme that succeeds in making higher education more *affordable*, but not necessarily more *accessible*. Countries that make free tuition a policy for HEIs are able to subsidize some costs, but other financial barriers, such as housing, school materials, and transportation, may still prove prohibitive for women and low-income students. Given that the barriers may be multiple for women and the most vulnerable, other programming and finance schemes may be needed to increase access and retention.[90]

> ✓ **FAST FACT:** Free public higher education, such as in Tunisia, Egypt, and Morocco, make HE more affordable, but are essentially subsidizing the wealthy. Meanwhile, unequal access based on socioeconomic background and other barriers may persist.

c) Student loans

Student loans are not common in low-income countries, where women's access is lowest. They do exist in countries such as Mexico, Kenya, Malawi, and Rwanda, although there are few studies on how they affect access and retention.[19,79] Student loans may be an attractive option because they directly link future earnings to present needs, and are not dependent on HEI or government funds. However, in countries where credit markets are not developed, lenders may not take risks on the most vulnerable students, who do not have a credit history.[19] Accessibility to higher education has been improved through student loans in some contexts, but supplemented by living support schemes, quota systems, expansion of higher education infrastructure outside of urban centers, and distance education.[48,82]

Other financing schemes have been used, such as voucher programs and conditional cash transfers, but further research is needed to determine which is best suited for specific contexts.[8,58]

HEI Support Services to Increase Retention

Support services in HEIs should focus on the specific needs of women, which may differ by context. As discussed earlier, women may face barriers such as being academically unprepared, opportunity costs, and a lack of social support. In addition, the transition to higher education can be a cultural shock for some, especially from rural settings. Appropriate support services focus on the academic, social, and socioeconomic needs of women, and may include several of the following: remedial academic support, work-study programs, service learning projects, academic counseling, mental health and wellness programs (including mental health counseling), disability services, services for pregnant or married women students, peer networks, leisure activities, and safety and security support services and awareness.[8,17,43,50,72,73,88] Although there are numerous examples of these support programs, there is little research available to verify how effective these supports are in increasing retention.

To reduce stigmatization of recipients of affirmative action, it may be worthwhile to engage the general student population in socioeconomic and gender inequality conversations and to develop campaigns refuting the image of unfair selectivity. Students from underprivileged groups might feel more welcome in the institutions if they know that the HEI acknowledges their struggles.[71]

SPOTLIGHT: Collaborating, Adapting, and Learning for Sustainable Career Centers in Morocco
The USAID Career Center program in Morocco has been a prominent model in increasing youth employability through career training and information, skills workshops, and counseling made possible through effective partnerships with the private sector. The Virtual Career Center offers online resources and services as well. By utilizing the Collaborating, Learning, and Adapting Framework to guide implementation, the Career Centers have become scalable and sustainable at the national level. Specifically, they offer a range of successful workshops and training to build both industry-specific knowledge and the soft-skills necessary for the labor market. Counselors and Career Center Advisors emulate a near-peer model of advising to help guide participants in considering their gender assumptions by facilitating gendered conversations related to the workplace and gender biases in careers. Moreover a mid-term performance evaluation found that women were more likely to benefit and utilize the resources provided through the Career Centers than men. This finding illustrates how the USAID Career Center program can serve as a model for targeted higher education guidance and counseling for all genders, particularly women.

Increase the Number and Quality of HEIs

Only 6 percent of young people in sub-Saharan Africa are enrolled in higher education institutions, compared to the global average of 26 percent.[80] Globally, private HEIs have expanded at a faster rate compared to public HEIs to meet the growing demand in higher education.[1] Research examining the rise in private HEIs cites mixed reviews; some studies suggest that the increase in private HEIs alone may not be enough to adequately address both the demand and ensure equitable access since private HEIs have higher tuition costs.[4,82]

Bringing higher education closer to potential beneficiaries through the creation of new higher education institutions in underserved regions has proven to be an effective strategy for greater equity in many countries.[70] For example, the development of HEIs in rural areas in India has resulted in exponential increases in women's enrollment, while growth in urban areas has been much more modest.[8]

The rapid expanse in HEIs may have had a negative effect on the *quality* of higher education in many countries, although this is something that few researchers and policymakers are discussing.[9] Developing nations have the challenge of increasing access that is equitable, while also increasing quality, and raising adequate funds for expanding the size, scope, and quality of their HEIs.[9] One can learn from mistakes made at the primary level in the early stages of the *Education for All* initiative, leading to overcrowded classrooms, strains on school and local government infrastructure, and poor learning outcomes in a number of contexts.[48,60] Since the Sustainable Development Goals now include higher education as a priority (while the Millennium Development Goals did not), developing nations are in great need of partners in improving the quality of higher education.[37]

> ✓ **FAST FACT:** Women only represent 10-20 percent of the total labor market and are mainly concentrated in occupations that are not linked to technology production and senior management.[92]

The increased participation in higher education has not necessarily been accompanied by sufficient employment opportunities for labor markets, a situation that has worsened during the COVID-19 pandemic.[82,65] HEIs must also ensure that courses are relevant to industry needs, and graduates must secure better jobs and economic security than they would otherwise have achieved.[66,82]

Improve Data Collection, Analysis, and Dissemination

In order to make policy and programming decisions to increase equitable access to, retention in, and completion of higher education, there is a need for individual HEIs to generate better data. More useful data is disaggregated by sex, disability, race, ethnic or social origin, sexual identity, socioeconomic status, religion, language, geographic location, sexual orientation (when possible and safe), family, and other status.[73] It is also important to understand how gender intersects with other demographics in different contexts, and what the specific barriers are for different contexts. Furthermore, this data should be available to the public, keeping personal and identifying data strictly confidential.

There also needs to be an increase in research led by those in-country, especially by women.[2] An extensive desk review indicated that 65 percent of the articles with "student retention" in their titles were authored by people located in the United States, with a further 14 percent by authors in the United Kingdom, Australia, or Canada.[68] In 2020, just 30 percent of the world's university researchers were women,[69] and 32 percent of African-led researchers were women.[12] It would also be beneficial to involve students as partners in research, as it would also engage students as active partners in learning. When students step out of the role of passive consumer, it enables them to value their own voice and expertise, navigate conflict and uncertainty, overcome adversity, and take on leadership roles.[2] Furthermore, involving female students in research may also contribute to retention, but that needs to be an area of further research. When speaking of women's access and equity, women should be leading the research in this area, in adhering to the principle "nothing about us without us."

8. CONCLUSION

Access to higher education and the number of HEIs has increased exponentially over the past several decades, but this access has not been equitable. Women have historically been excluded from higher education, and the vestiges of that culture and system continue to make access as well as retention and completion a challenge for many women. Although more women than ever before have access to higher education and are completing degrees, men still outnumber women in many LMICs, largely in sub-Saharan African and the Middle East. As governments and donors invest in higher education, equitable access, retention, and completion, including for women, must be targeted and intentional. However, it is important to keep in mind that women are not a homogenous group. Intersectionality of various demographics must be examined, including ethnicity, disability, religion, socioeconomic status, geographic location, gender identity, gender expression, sexual orientation, and conflict-affected. In addition, the barriers to equitable access, retention, and completion are complex and nuanced, and require localized research and solutions. Engaging women and other vulnerable groups in both the research and the solutions will not only ensure pertinent solutions, but will foster female leadership in an arena where women are still underrepresented. More research is needed to contribute to the body of knowledge, including how gender intersecting with other demographics affects access, retention, and completion. There is a dearth of rigorous research on gender-based violence in HEIs, and how female leadership affects women's retention and the environment of a campus. Most of all, more rigorous research is needed to determine which interventions best meet the needs of women and vulnerable groups, without sacrificing quality of education.

9. GLOSSARY OF TERMS

Access: Having been accepted to and enrolled in a higher education institute.

Accessibility: The process of designing courses and developing a teaching style to meet the needs of people from a variety of backgrounds, abilities, and learning styles.[54]

Affirmative Action: A set of laws, policies, guidelines, and administrative practices granting special consideration to historically excluded groups, specifically racial minorities or women. Affirmative action emphasizes "targeted goals" to address past discrimination in a particular institution or in broader society through "good-faith efforts to identify, select, and train potentially qualified minorities and women."[16]

Affordability: The ability to purchase needed/appropriate education and have sufficient resources to enjoy at least the minimum consumption of other essential goods and services.[11]

Completion: Successfully finishing all required courses and obtaining a degree or certificate from an HEI.

Diversity: A composite of the various differences represented, such as age, religion, and geography.[26]

Equitable Access: The ability of people from all backgrounds to access higher education on a reasonably equal basis, but also be adequately prepared and equipped for higher education.[87]

Equity: The process of ensuring that processes and programs are impartial and fair and provide equal possible outcomes for every individual.[5]

Gender: The economic, political, and cultural attributes and opportunities associated with being male or female.

Gender Mainstreaming: The process of assessing the gender implications of any planned action, including legislation, policies, or programs, in all areas and at all levels. A strategy for making gender-related concerns and experiences an integral part of the design, implementation, monitoring, and evaluation of all legislation, policies, and programs so that all genders benefit equally and inequality is not perpetuated.[31]

Higher Education: Refers to a range of both university and non-university institutions (teacher training colleges, community colleges, technical institutes, polytechnics, distance learning programs, and academically linked research centers) within a diversified post-secondary education.

Online Learning (also known as e-learning): Learning that takes place over the Internet.

Retention: The act of remaining enrolled and attending courses from semester to semester, but does not necessarily refer to success in passing courses.

Scholarship: A grant or payment made to support a student's education, awarded on the basis of need or merit.

Sex: The biological characteristics that define humans as female or male.

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For more information on USAID's work in gender and education, please visit https://www.edu-links.org/.
To contribute to or learn more about the USAID's Higher Education Learning Agenda, please contact us
at helearning@usaid.gov.

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