

HER Initiative to Lead Change: The Power of Education



IIE Higher Education Readiness Program (HER):
Increasing Access to Higher Education for Ethiopian Girls

Final Evaluation of Pilot Program
Cohort One

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INSTITUTE OF
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IIE Center for
Academic Mobility
Research and Impact

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INTRODUCTION

The Higher Education Readiness (HER) program is an initiative of the Institute of International Education (IIE) that aims to increase academic performance, leadership, and secondary school graduation rates of Ethiopian female students in preparation for university. A pilot program was launched in 2013 for 100 female students in two upper secondary schools in Addis Ababa, Ethiopia: School A and School B. The program has had two cohorts to date; Cohort One graduated from the program in June 2015 and is the focus of this report.

The HER pilot program in Ethiopia was the first implementation of the program; it was closely studied to measure the value-added of program activities. The outcomes and impacts of the HER students were measured against a comparison group of 67 female students from the same schools who share a similar background. The HER program team worked with IIE's Center for Academic Mobility Research and Impact (hereafter the evaluation team) on the monitoring and evaluation activities of the program. To learn more about the HER evaluation methodology see Appendix III.

The purpose of this report is to measure the successes of HER's Cohort One in achieving the program goals, as detailed in each of the respective report chapters:

Chapter 1: Personal Growth	Chapter 2: Academic Performance	Chapter 3: Social Impact
<ul style="list-style-type: none">•Strengthen the self-confidence, leadership and entrepreneurship skills of HER program participants	<ul style="list-style-type: none">•Increase the rates of graduation and matriculation to university among HER program participants•Improve the academic performance of HER program participants, with particular emphasis on English and mathematics	<ul style="list-style-type: none">•Improve the capacity of schools to address academic and social barriers to girls' education•Improve the perceptions and importance of girls' education among guardians and communities

The first section, "At a Glance", presents a brief overview of the key findings from the three chapters, as well as best practices and lessons learned from the pilot program beneficial for future HER cohorts and other programs. It also details the participants' activities after program graduation. The concluding section summarizes the best practices and lessons learned and draws conclusions from Cohort One's program experience.

Three appendices offer technical and background information on the program. Appendix I analyzes key components of the HER program, with reflections on each component from the key stakeholders such as HER students, guardians, and mentors. Appendix II covers the education context in Ethiopia and the need for the HER program. It also presents key information about the two schools in the HER program: School A and School B. Finally, Appendix III describes the evaluation methodology and limitations.

All quotes in the report are from HER students unless noted otherwise. All reported relationships in the report are statistically significant unless stated otherwise.

COHORT ONE
GRADUATED IN
2015

THIS REPORT
EVALUATES
COHORT ONE

PROGRAM GOALS
&
REPORT OUTLINE

AT A GLANCE

Key Findings



100 students enrolled in the HER program.
96 students graduated from high school¹.
62 students successfully matriculated to university.

Increased graduation and retention rates.

- In School B the HER students' dropout rate was ten times lower than the comparison group.
- Graduation rates of HER students in both schools were above 90%.
- In School A 77% of participating students matriculated to university and in School B 52% did so. These numbers are higher than the female average in their respective schools and in Ethiopia.
- HER students achieved the highest possible results in the national exam in both schools.

Increased leadership skills.

- HER students indicated greater leadership skills and qualities than the comparison group.

Improved perception of self-value.

- HER students discovered for themselves that their value as women is equal to that of men. This understanding changed how they perceive themselves and affected their behavior and plans for the future.

Increased knowledge about reproductive health.

- HER students were empowered by the reproductive health training, felt more confident to attend university, and were committed to sharing the knowledge.

Increased financial literacy and entrepreneurship skills.

- HER students attended financial literacy and entrepreneurship trainings. 50% reported applying this new knowledge one year following the trainings.

Increased understanding of the importance of education among participants.

- 96% of HER students better understood the importance of education.

Increased understanding of the importance of education among HER guardians².

- HER guardians positively changed their understanding of the importance of girls' education.
- 93% of guardians better understood the unique needs of female students.
- 98% of guardians increased their knowledge about how to better support female students and their HER students in their studies.
- HER students confirmed a significant increase in guardians' support for their education.

¹ View [HER Program Graduation](#) on YouTube

² HER guardians include all primary caregivers for HER students, including parents, grandparents, and siblings.

ACADEMIC PERFORMANCE



PERSONAL GROWTH



SOCIAL IMPACT





Schools increased their commitment to girls’ education.

- In the second year of the HER program, School B collaborated with the local office of the Ministry of Education to involve students in extracurricular activities.
- The Girls’ Club, which included HER girls in School B, won the school a prize for its efforts around girls’ education from two Ethiopian government agencies: the Ministry of Youth, Women, and Children Affairs and the local chapter of the Ministry of Education.
- HER students from both cohorts actively participated in the Club, contributing innovative ideas to the discussions and were essential to the success of the Club.

HER students are already impacting and changing their local and global communities.

- HER students encouraged and inspired their siblings to value education more and study harder.
- HER students contributed to their local communities by advising them on financial and business matters and educating community women to read and write.
- HER students contributed to the UN Sustainable Development Goals through their participation in the “Girls’ Voices Initiative” in Ethiopia, organized by Let Girls Lead in collaboration with UNICEF.

HER students perceived the most program impact on their personal growth.

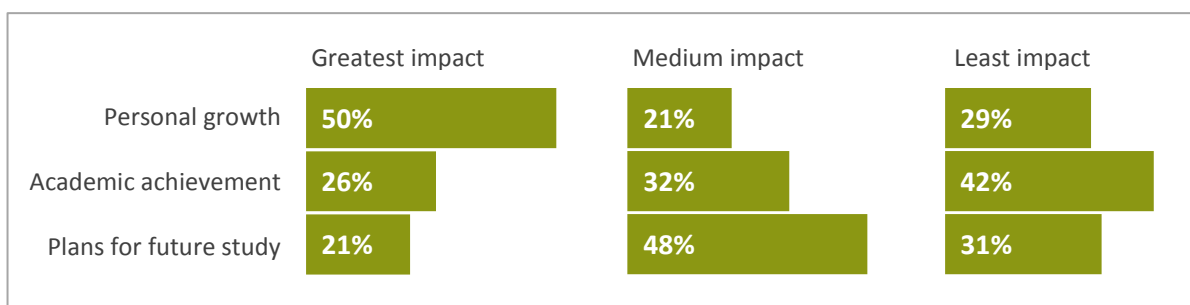


Figure 1

Best Practices

Focus on personal growth. Program components related to personal growth had a greater effect on the participants than was anticipated. This was a much-needed area of development that deeply affected HER students’ thinking, opinions, plans, and behavior.

Involve all stakeholders. The HER pilot program worked closely with the program participants and their guardians and accounted for their opinions in programming. This approach improved the program design, program results, and contributed to development of the participants’ leadership qualities.

Leverage alumni network. The HER program team recruited alumnae of a previous IIE program to mentor HER students. Having IIE alumnae as mentors ensured continuity of knowledge, gave alumnae an opportunity to give back, and inspired HER students to think of ways they could contribute to the community.

Take advantage of external opportunities. The HER program was flexible and open to new program activities and opportunities which allowed HER students to participate in a unique workshop with the “Girls’ Voices Initiative” in Ethiopia. During the workshop HER students, “visionary girl leaders” of Ethiopia, contributed to the United Nations’ post-2015 development agenda.

Assist alumnae in the transition. IIE created a new program, “HER Future”, to support HER students through university. The HER program

assisted HER students who were not accepted in university in finding scholarship opportunities for vocational training.

Lessons Learned

Key lessons learned from the program and the evaluation are listed below, with a detailed discussion in the concluding section of the report.

Conduct extensive research on the proposed sites (or schools) for program implementation and consider these alongside the expected program outcomes. Variation in program sites may well affect the magnitude of the results that are observed. This lesson is particularly important for programs that depend on government agencies for site or participant selection and pilot programs that assess the value and success of their program design based on the magnitude of the effect of program components.

Research background statistics on relevant external factors. In the program design, it is best to identify external factors that are critical to program implementation early on and conduct research into how they may affect program implementation. This allows for informed decision making on how best to mitigate programmatic challenges that may arise because of such factors.

Perform needs assessment for programmatic areas new to the organization. The HER program was IIE’s first experience conducting a program with a direct tutoring component in Ethiopia. Program experience showed that there was much to learn about how to best increase students’ academic performance and how to best design the academic program component.

Identify for the comparison group early on how they will benefit from the program. In comparison evaluation designs, it is advisable to plan beneficial activities for the comparison group and notify them about such activities in advance. It ensures a safe space for program participants and continuous study participation of the comparison group.

Manage negative impact. The program team should monitor the climate around the program participants and coordinators in schools. If there are any negative feelings towards the program in the schools, the program team should do their best to manage them.

HER Future

The HER program is a key IIE initiative and the Institute is committed to providing ongoing opportunities to see HER students through to their university graduation. IIE recently decided to expand its commitment to HER students and support their university studies through “HER Future.” In September 2015 HER students from Cohort One who were admitted to university received scholarship support and supplies. IIE will continue to evaluate their personal, professional, and social successes.

IIE also supported HER students who were not admitted to universities in pursuing other

opportunities. The HER program team identified a scholarship for a vocational education program at “Project E” Hospitality Institute in Addis Ababa. The scholarship was highly competitive and only 20 applicants were selected. The HER program assisted alumnae in their application process and six HER students were offered two-year scholarships with the Hospitality Institute.

In addition, Cohort Two will graduate from the HER program in June 2016 and Cohort Three will start in September 2016.



CHAPTER 1. PERSONAL GROWTH

Strengthening the HER participants’ self-confidence, leadership, and entrepreneurship skills, and increasing the importance they place on education, were two of the strategic objectives of the HER program. The acquisition of these soft skills was theorized to help students work through their challenges and achieve their academic goals.

This chapter analyzes the progress HER students have made in their personal growth and development of socio-emotional skills over the course of the program. First, it considers the self-perceived impact of the program on HER students. Then it discusses the progress of the HER cohort relative to that of the comparison group in developing leadership competencies. The section distinguishes two particular aspects of personal growth: the change in the perceived value of women, and the application of financial knowledge and entrepreneurship skills. It then features two program highlights: a university visit and a discussion with an inspirational speaker.

Program components for personal growth and socio-emotional skills
Leadership and life skills training
Mentorship
Inspirational speaker series
Entrepreneurship training
Reproductive health training
University visit
Selection into a prestigious scholarship like the HER program also contributes to confidence building.

Becoming a Visionary

HER students indicated a great program influence on their vision, self-perception, and where they placed education in their future plans. 100% of HER students saw education as a way to achieve their career dreams and at the end of the school year planned to apply to university. All guardians found it very important for their families that HER students continued their education in university.

Though the program successfully emphasized the importance of education, many pre-existing contextual constraints on HER students remained and prevented the students from achieving all their academic goals. Not all HER students were able to enter the higher education system, although the change the HER program fostered in them went beyond immediate educational outcomes.

The program enabled students to envision their future more clearly and increased their belief in themselves. These changes will benefit them as they transition into adulthood and help them make positive choices throughout their lives.

I can say that the HER program is everything to me. It changed my feeling of emptiness and makes me a hopeful girl. Through time, the leadership, life skills and entrepreneurship trainings changed my personality. I have a different personality on my understanding and thinking ability than I used to have two years ago.

I prefer to consider IIE as “a family” other than “an organization” because you treated us like a family. Even though we didn’t satisfy you by scoring good result, I can assure you that we are changed inside by all the support you have been delivering over the years. I would like to express my heartfelt gratitude for making me a visionary girl who don’t easily give up.



The HER program increased the perceived importance of education for the participants.

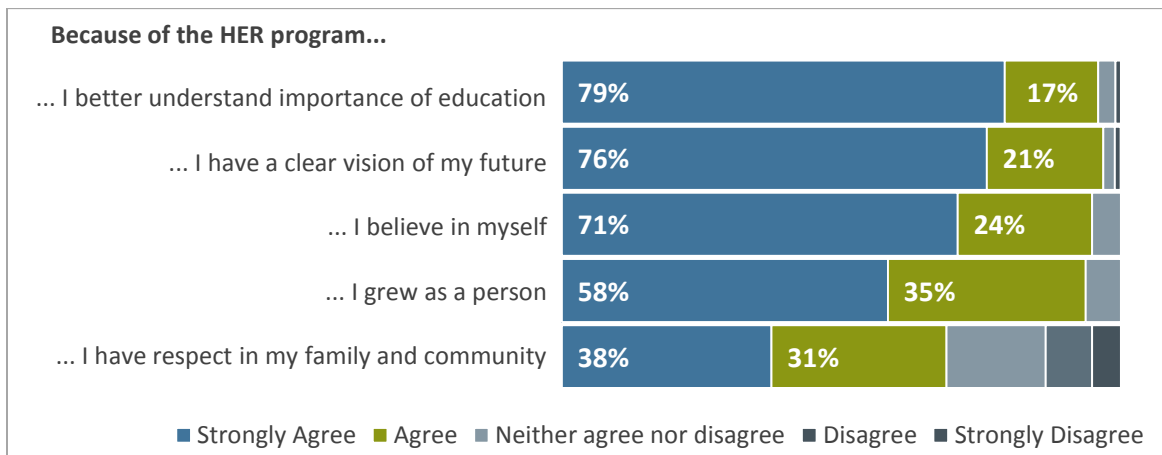


Figure 2

HER guardians rated the magnitude of the HER students’ progress in all the categories much higher than the students themselves. In particular, almost all guardians indicated that HER students gained more respect in their families and communities because of the program. The Social

Impact chapter discusses the impact of HER students on their communities in more detail.

I have understood the value of education more than ever.

Leadership Skills

The baseline survey revealed no significant differences between the HER and comparison groups on measures related to leadership. After each program year, the HER and comparison groups were given a series of statements related to leadership competencies.

With each program year HER students continuously developed their leadership qualities and had a significantly higher overall leadership score than the comparison girls. Further analysis shows that significant differences were achieved in all five areas of leadership. This confirms that the program was successful in inspiring HER students to perceive themselves as leaders and to internalize the leadership qualities introduced by the program.



HER students increased their leadership skills and qualities because of the program.

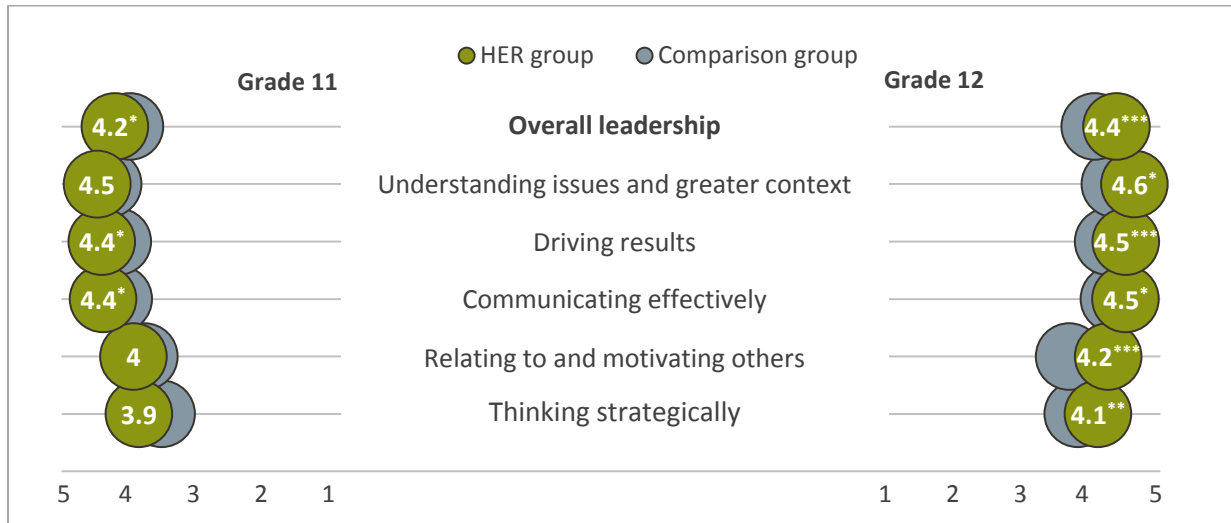


Figure 3

Note: Current leadership matrix was introduced in Grade 11.

* = $p < .05$; ** = $p < .01$; *** = $p < .001$

Before the program, HER students in School B had lower leadership scores than the comparison group. After the first program year their leadership scores were significantly different from the comparison group, yet there were no

significant differences in School A. By the end of the program HER students in both schools exhibited a significant increase in leadership qualities compared to the comparison groups.

HER students in both schools reported increased leadership qualities.

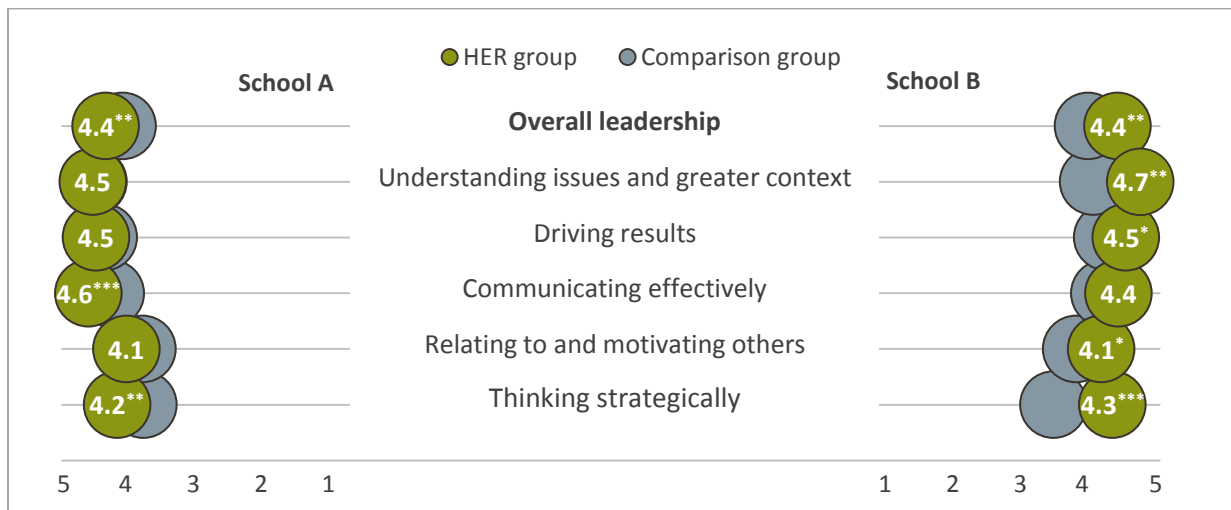


Figure 4

* = $p < .05$; ** = $p < .01$; *** = $p < .001$

More HER students consider themselves leaders than the comparison group. This finding is consistent with the midterm findings and is true for both schools.

People around me are saying that I have grown to be a critical thinker as they involve me in decision making situations.



Leadership in the Community

Participation in extracurricular activities is a way for students to practice their leadership qualities and show their commitment to their communities.

HER students in School A increased their participation in extracurricular activities; however, there was no significant difference in their participation vis-à-vis the comparison group.

HER students in School B significantly increased their participation in extracurricular activities throughout the program. This was not true for the comparison group: 32% more HER students participated in the extracurricular activities than comparison students. This increase is likely related to the work of School B around female education and extracurricular activities. See the Social Impact chapter for more information.

More HER students participated in extracurricular activities than before the program.

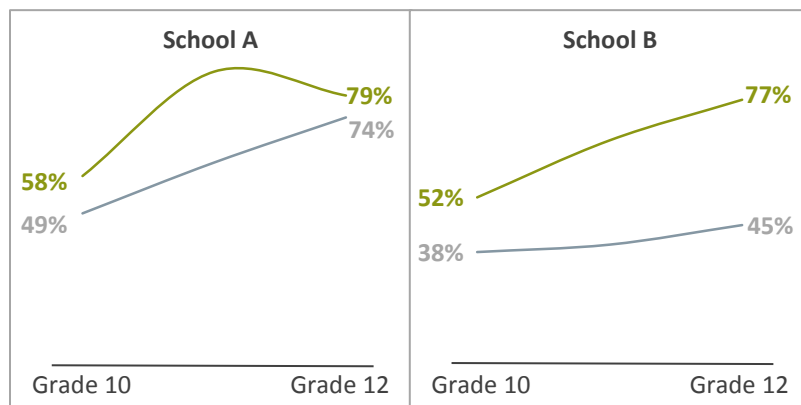


Figure 5

Note: Extracurricular activities include participation in after-school clubs, volunteering, or involvement in community activities.

There was a significant relationship between partaking in extracurricular activities and the development of leadership qualities. HER students who devoted time and effort to community involvement also improved their strategic thinking

and were better at relating to and motivating others.

By her leadership she has become a role model and encouraged a lot of people. (HER guardian)

Self-Value As Women

Through the HER program, many students discovered that their value as women is equal to that of men. This understanding changed how they perceive themselves and affected their behavior and plans for the future.

From the second inspirational speaker, I have got two [pieces of] knowledge. First, they are women and I can see myself tomorrow - where I can reach. Second, even if I am a girl there is nothing which [will] hinder me to reach my goal.

One of the HER girls raised a question to Ms. Selome Tadesse [*Inspirational Speaker*] as follows; “How do you describe women?” and she replied; “They are human beings!” What an answer! I think the society has to know this carefully so that they will respect us.

[In leadership training] we discussed civilized international view which encourages women to not feel inferior because no job is gender specific as long as the individual works hard and equips themselves for its requirements.



Entrepreneurship Skills

In the summer of 2014, HER students participated in entrepreneurship training. Half of the students reported being able to apply what they learned within a year. Other students have not had the chance to implement their new knowledge but are planning to do so during their future careers.



The training changed how students approached their personal budgets. They started spending wisely and saving smarter. Their improved spending habits were noted by their siblings, guardians, and the school program coordinators.

Some students went beyond the basics of careful spending and opened savings accounts or invested money in Ekub, which they learned about in the entrepreneurship training. Ekub is a traditional form of peer-to-peer banking and lending in Ethiopia. It is similar to many Rotating Savings and Credit Associations (ROSCAs) around the world in that the members of the group pool funds together and once a month a randomly chosen member (typically by lottery) receives all the money pooled during that round. The next month another member receives all the group money, allowing each member to receive a large sum of money once per set time period.



HER students learned how to leverage available resources and developed their own business schemes. For example, one student sold fruit gelato she made at home and another gathered a small group of HER students to bake bread at home and sell it during lunch time in school.



HER students made recommendations to their relatives on how to better operate their businesses. They also shared their knowledge with members of their communities, influencing the communities' financial well-being.

My family is from the business sector and I told them what I got from the training, and currently we are generating better income than before.



The training taught HER students not only financial skills but better management skills that they were able to immediately apply to their studies.

From the training I have grasped the skill of investing more time on what you are engaged in. For example I am a student and I am expected to invest more time and effort on my school, which I did as well.

Highlight: University Visit

In the summer of 2015, HER students visited Addis Ababa University. The HER program team and the gender office of the university organized the visit. Students toured the campus and participated in a panel discussion about how to strategically select their field of study. The expert from the office of student affairs, a trained psychiatrist with significant experience in advising students, led the discussion. The panelists discussed various factors that should influence their selection of a field of study, such as personal interest, personality type, market value of the profession, family choice, and university rating.

Panelists also gave students important advice within the context of the Ethiopian education system. When completing the National Exam students must choose their preferred universities and fields of study; however, the government assigns students to specific universities and fields of study based on their exam scores, among other considerations. If a student does not score high enough she may be assigned to a university or field that was not her priority.

The expert underscored that HER students should not give up if they are not admitted to their first choice university or discipline and can succeed in any field that they are assigned. According to the HER program team this message had a powerful impact on the students.



I have a big desire to join university and graduate. The visit strengthens my wish.

I believe the things I heard on the panel meeting will help me throughout my university life.

It helps me to have positive attitude if I join field of study I am not interested in. It gave me the courage to become competent in any field of study I will be assigned.

It was one of the best experiences I had in life.

Highlight: Inspirational Speaker

Inspirational Speaker Ms. Yetnebersh Nigussei greatly impacted the HER students. Despite her disadvantaged background and losing her eyesight at a young age, Ms. Nigussei graduated from Addis Ababa University with a law degree and is a human rights defender and co-founder of the Ethiopian Center for Disability and Development. She shared her story with HER students and used the Q&A session to empower them.

You can read more about Ms. Nigussei's visit in [the IIE blog](#).



Ms. Nigussei: I have been living served by others and those people who used to serve me had contributed a lot in my life. I always felt like I should pay them back for what I got. You are getting similar privileges from IIE, how will you pay them back?

Student: I will share what I got for others; by becoming a successful and responsible person; by fulfilling my vision and scoring good results in my education.

Ms. Nigussei: You are lucky of getting this scholarship. You are a seed that fell on a good land; for this reason do all your best to grow on strong concrete. There is no small career! Whatever you are responsible for, you should do it with full responsibility and power.

Student: I am lucky to have this live conversation with you. You are using very empowering words.



CHAPTER 2. ACADEMIC PERFORMANCE

This chapter presents the HER students’ progress in academic performance in all subjects (as calculated by a Grade Point Average (GPA)), English, and Math. The analysis compares the students’ progress to that of the comparison group in each of the participating schools.

Significant differences in the context of each selected school affected the magnitude of HER program impact in each location. The following section analyzes the national exam performance of HER students in the program schools. See Appendix II for more information about each school.

School A

School A is located in the city center on a busy market square. It serves students from low income families who join the school in grade 11 from other schools around the city. At the end of the HER program, the school had 48 HER and 35 comparison students, who comprised 3.5% and 2.6% of all 12-graders in School A.

The school is known for its high academic performance; however, this year’s average school GPA dropped by 30 points. The evaluation team was not able to identify the reason for the change. This case illustrates the challenge of obtaining meaningful data from the program sites.

University Admission

77% of HER students passed the national exam and were eligible to enter university. A HER student from School A scored 500 points on the national exam, the highest result in the school.

HER students at School A scored as high as the comparison group, who came from the same feeder school.

90% of HER students joined natural science departments in universities and the remaining 10% chose social sciences.

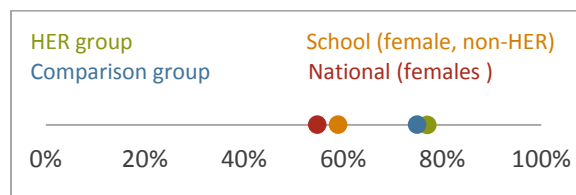


Figure 6
Source: National female level is provided by the National Exam Organization, 2015.

Completion of Secondary Education

94% of HER students graduated from School A. The HER students’ dropout rate was three times lower than the national average for females in upper secondary school (16.8%).

The HER students’ dropout rate at School A was similar to the comparison group; both were lower than the national level*.

If it wasn't for HER she wouldn't have continued 12th grade because of economic and health issues. (HER guardian, School A)

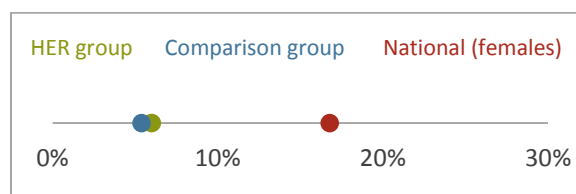


Figure 7
Source: National level is calculated based on Joshi, R.D., Verspoor, A. (2013).
*Students who have dropped out had significantly lower scores starting in 10th grade.

*One HER student took academic leave due to health issues in 2014. She returned to school in 2015 and was reinstated in the HER program. Though she is counted as a drop-out for the purpose of the study, it is important to recognize her commitment.



GPA, English and Math Scores

The HER program did not have a significant effect on the participants' academic scores at School A. This may be because the school had its own tutoring classes that were available to all students. It was noted that HER students had lower attendance in the HER program tutoring classes in the last semester of school, potentially in favor of school-provided tutoring.

The trends for English and Math also were similar for the HER and comparison group, with a minor decrease.

It should be noted that the reported school data from School A varied significantly between 2013/14 and 2014/15 academic years (30 points) and thus it is difficult to compare to the HER and comparison group trends.

HER students and the comparison group had a similar downward trend throughout the program.

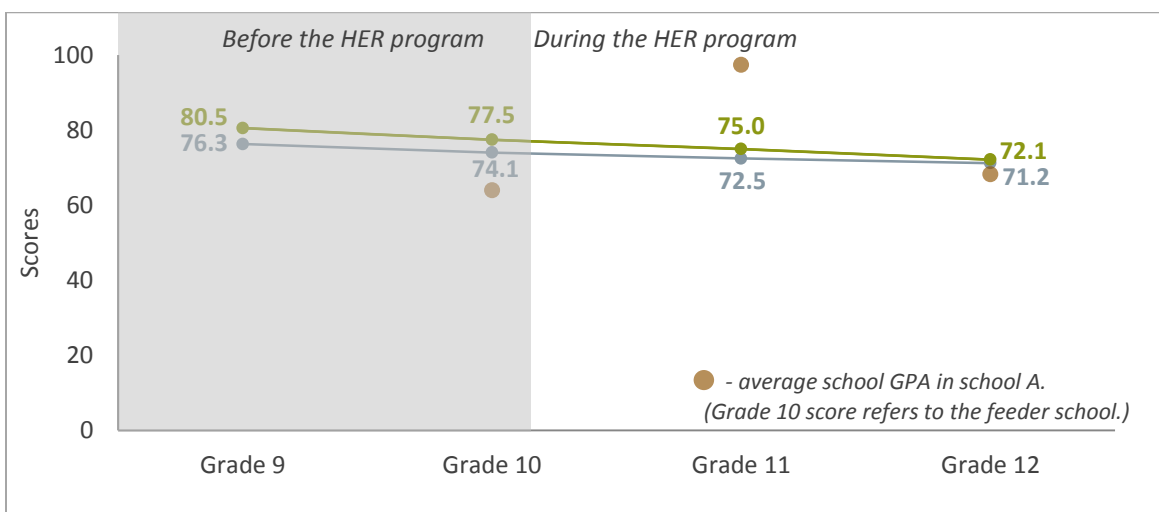


Figure 8
Note: The HER and comparison group students transferred from the same lower secondary school to upper secondary School A after grade 10.

English and Math scores decreased for HER students and the comparison group.

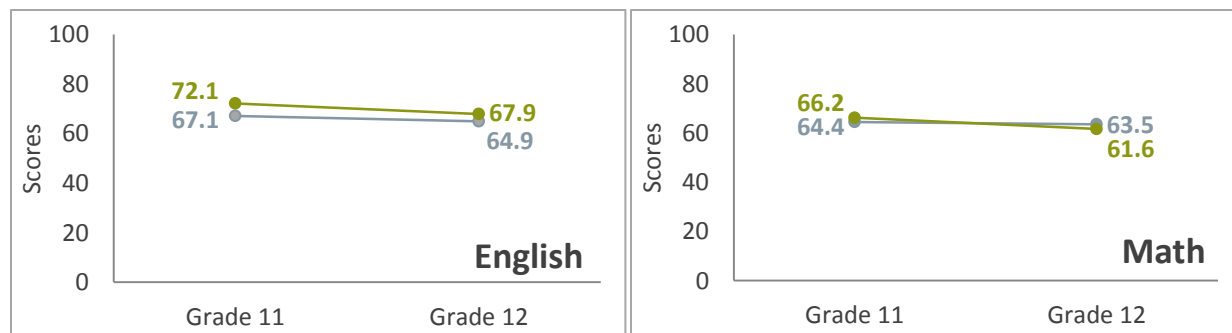


Figure 9



School B

School B is located away from the city center in a semi-rural area. Most students come from urban marginal and low income communities and have a long commute to school. At the end of the HER program, the school had 48 HER and 21

comparison students. HER students represented a third of all 12th graders and half of all female students. Comparison students represented 13% of all 12th graders and approximately 20% of all female students in School B.

University Admission

52% of HER students passed the national exam and matriculated to university, which was 1.5 times higher than the comparison group. Two HER students from School B received the highest school results: 459 and 439 points.

60% of HER students joined natural science departments in universities and 40% chose social sciences.

Socio-economic status did not influence the HER students' performance indicating that the HER program was able to level the playing field for its participants.

In School B HER students performed the best in the school. "The highest achieving girls in the school are HER girls." (HER program coordinator, School B)

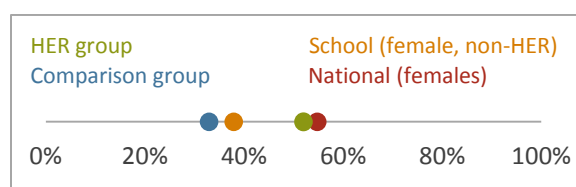


Figure 10
Source: National female level is provided by the National Exam Organization, 2015.

Completion of Secondary Education

98% of HER students graduated from School B.

At the end of the HER program, the dropout rate for HER students in School B (2%) was ten times lower than the comparison group (21%) and eight times lower than the national average (17%). This finding is particularly important because HER students in School B had lower socio-economic status than comparison students, which put them at a higher risk of dropping out of school.

In School B HER students had much lower dropout rate than comparison group*.

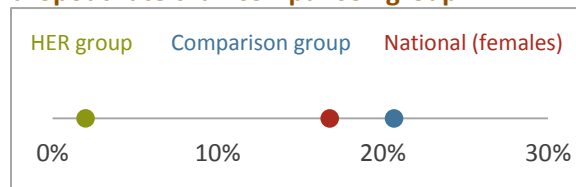


Figure 11
Source: National level is calculated based on Joshi, R.D., Verspoor, A. (2013).
*Students who have dropped out had significantly lower scores starting in 9th grade.

GPA, English and Math Scores

HER students and the comparison group showed improvement in their overall academic scores, and English and Math scores. There is a clear relationship between their improvement and the increase in the school's GPA. The HER and comparison group students comprised almost half of all students in their grade level. An additional

30% were male students whose GPA was already significantly higher than female students' GPA. Therefore, an increase in the HER and comparison students' GPA reflected an increase in the overall school's performance. This explains the similar trends between the school average and the HER and comparison group's scores.



HER students and the comparison group improved significantly in grade 12.

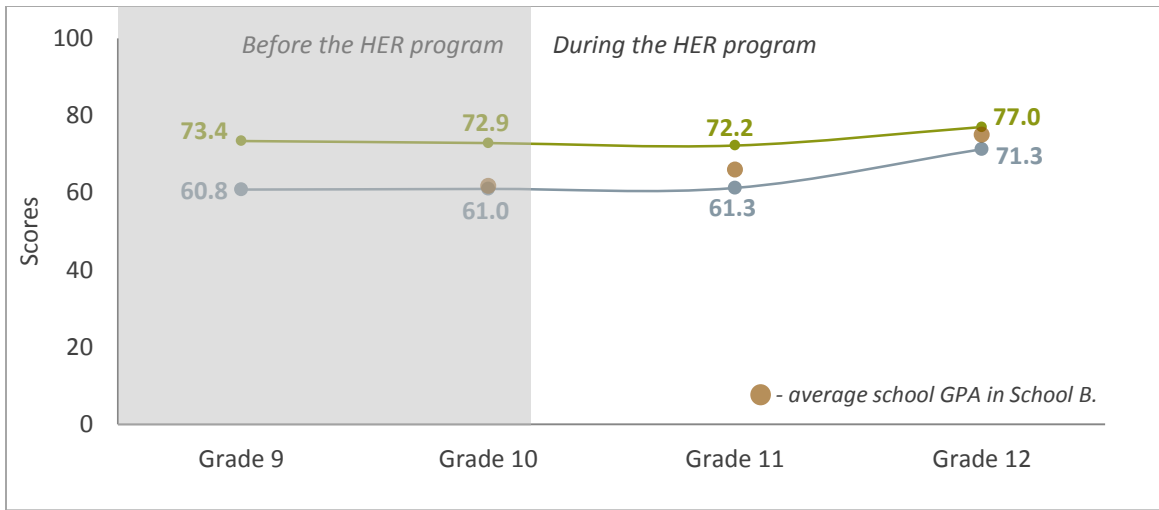


Figure 12

HER students and the comparison group increased their English and Math scores.

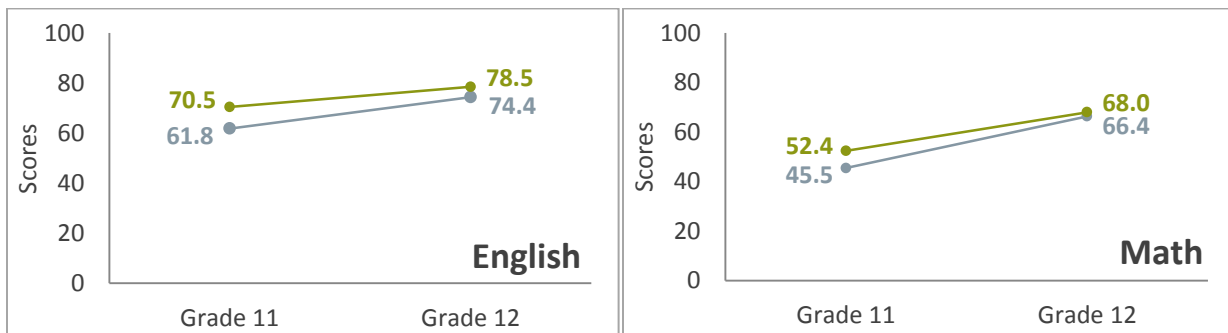


Figure 13



CHAPTER 3. SOCIAL IMPACT

The HER program intended to create sustainable change and a transformative multiplier effect by influencing community behaviors related to the academic and social barriers to girls' education among various stakeholders: HER guardians, program communities, and participating schools. The hypothesis was that if community stakeholders improved their attitudes towards HER and other female students, and built capacity to improve girls' education, then schools would experience improved female academic performance, leadership and graduation rates at the secondary level, and more female students would continue to higher education. This chapter investigates the program impact at the multi-generational level.

Impact on Family

Guardians

Guardian workshops increased the importance HER guardians place on HER students' education; improved their relationship with the students; and their overall attitude towards female education*.



*HER guardians refer to all primary caregivers for HER students, including parents, grandparents, and siblings.

Guardians and HER academics

Initially, though all guardians wanted their HER students to continue to university, it appeared that they were not offering the support necessary to achieve this goal. For example, during the first year of the program many students had difficulty obtaining guardians' permission to attend various program components that took place outside of regular school hours.

As HER students developed leadership qualities and learned effective study skills, they were able to communicate their educational needs, such as moral or practical support, to their guardians.

To support HER students, the program organized guardian workshops that provided space for discussion of the guardians' roles in HER students' education and the HER program. Through the workshops, guardians were able to become

involved in their HER students' education and support them to the best of their ability:

- Guardians learned the importance of adequate study time and ways to provide it to HER students.
- Guardians reduced the burden of household activities.
- Guardians ensured siblings did not interfere with the HER students' studies.

My daughter used to be burdened with lots of household activities and she can't ignore it. After joining the program, she politely told me that; "if I don't perform well the program will not continue for my juniors. To do so I have to minimize the household activities". Knowing that she is becoming visionary girl and the way she talked convinced me and now she is focusing on her education. (HER guardian)



One evening, while the daughter was doing assignment, power interrupted and the daughter cried. I made light with three candles and promised her that I will buy her recharging battery bulb so that she doesn't need to be bothered whether there is power or not but to focus on her study. I mentioned this story to tell the group that as the girls are getting support from IIE, we are also expected to do our best to support our daughters to focus on their education. (HER guardian)

If IIE comes to support our children from a very distant place why not I go to my neighbor's house to mold each other and make our children concentrate on their education? (HER guardian)

My mother values my education more now.

Because of the support it has given me motivation to educate her. (HER guardian)

Guardians' support was important for HER students' academic performance and personal growth. HER students who by the end of the program felt more supported by their guardians to continue their education had a higher GPA at the end of upper secondary school. Those HER students whose guardians supported them to do well in school scored themselves higher on leadership competencies. These relationships did not hold true for the comparison group.

HER guardians learned how to support HER students' education.



Figure 14
Note: minimum support = 1; maximum support = 5

Guardians and HER personal growth

HER students noted a change in their relationship with their families beyond just academics. The personal growth they experienced during the program made their families see them in a different light and improved their relationship.

93% of guardians increased their confidence in their HER student's abilities. 83% of HER guardians noted improvement in their communication with

HER students about their academics and future plans because of the HER program.

We are discussing any issues with my family more openly and the bond has been strengthened significantly.

I've learned different qualities of my child like her leadership ability, her self-confidence and her strong studying skill. (HER guardian)

Guardians and girls' education

Almost all guardians indicated highly positive changes in their understanding of the importance of education for girls.

The educational support that is given to her has changed me too. I have understood on practice why educating women is educating the society. (HER guardian)



93% of guardians better understood what female students need to study well and 98% of guardians indicated that they now know how to better support their female students' education.

I've learned that girls should be educated so as to have a better future, to make difference on her and the society's life. (HER guardian)

Educating women has far reaching benefits. I've learned so many things from HER. (HER guardian)

Siblings

HER students influenced younger siblings academically through direct assistance and by setting an example. They influenced the older siblings by sharing their entrepreneurship knowledge to help their siblings' businesses.

My younger sister has become a HER girl.

I have observed significant improvement with their academic performance.

I have become a model for my younger ones. They have even begun studying at night as I do.

I am planning to do all I can to help my youngest sisters who are just in the kindergarten. I have become more caring for them since I joined this program.

I recommended one of my siblings, who runs a small business, to make a market assessment on when to base his business to be more profitable. After getting my suggestion, he became more profitable.

Impact on Teachers and Mentors

Teachers

School teachers in both schools benefitted from the HER program. Teachers who tutored for the HER program were paid and received feedback on better tutoring techniques. Several school teachers took part in leadership facilitator training and some led the training for HER students.

Prior to the HER program, the HER and comparison group students did not have any significant differences in their perceived support from teachers. By the end of the program, HER students felt significantly more supported by their teachers.

The HER program increased teachers' support for HER students.

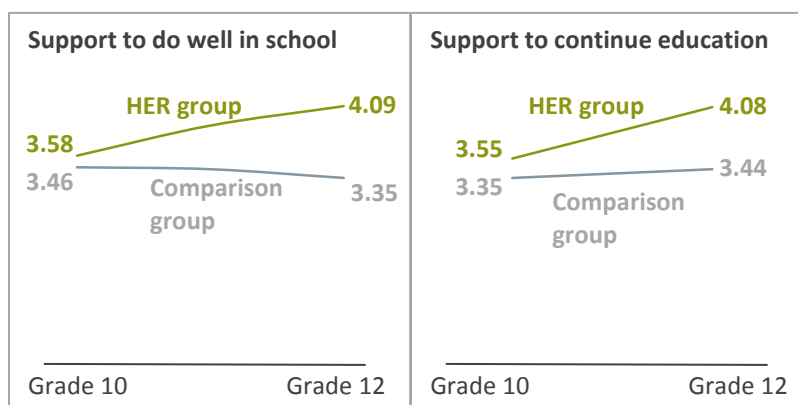


Figure 15
Note: minimum support = 1; maximum support = 5



Perceived support from teachers strongly affected the HER students' class participation, comfort with asking questions, and feelings of their academic and intellectual worthiness. HER students formed close relationships with their teachers during the tutoring sessions.

HER students who felt more supported to do well in school experienced a higher increase in their GPA than students who felt less supported. They also scored themselves higher on leadership competencies.

While overall positive, students had a variety of concerns about their teachers' performance. The concerns were related to teachers' selective support and to challenges typical for the Ethiopian education system, such as lack of time to complete the course or teacher absenteeism.

Whenever I am at school, all of my teachers are motivating me a lot. If I have questions they give me the detail of answers with full courage and passion.

My teachers are there to support me in various aspects, working exam questions, they bring books from library, advising me to score good grade. However there are days that they don't come to the class, which they took my precious time.

They make disintegration between medium and higher scorer students. They give much attention for those who score high. Since I am the medium student they don't give me much focus for my questions and any other supports.

Some of them don't finish the whole courses, but not everyone.

Mentors

Mentors for HER's Cohort One were selected from IIE's Ethiopia Women's Leadership Program (EWLP) alumnae. These young women received special training on mentoring and facilitating discussions at the beginning of the program. They also attended monthly group meetings with the HER program team to share their experiences and resolve any challenges that occurred during mentoring sessions. As a result of the HER program, mentors gained valuable experiences

that allowed them to apply the leadership skills they learned in EWLP and developed their mentorship qualities.

The previous leadership training I had with IIE changed my life for good and I want to give back that for my little sisters which is exactly my childhood desire. (HER mentor)

We should work together to have more students who are able to go for university. (HER mentor)

Impact on School

The HER program had a significant impact on the participating schools. HER program coordinators from both schools remarked that the HER program motivated other students who are not in the program to perform better and helped to achieve school-wide goals of higher academic performance.

They are growing to be role models for other girls in their school and the community. As promoting girls' education is one of the goals of the school, it is a huge support which helps us achieve those goals. (HER program coordinator, School B)

All in all they are exhibiting better academic performance and they are helping us achieve our set goals as a school as well. (HER program coordinator, School A)

Coordinators suggested that increased publicity and inclusiveness of the HER program would have a wider effect on the school community and would make the program a source of inspiration for everyone.

The HER program had an exceptional effect on School B. According to the HER program coordinator, before the program School B, situated far from the center of the city, was not



the first choice for high-performing students. The HER program made the school a desirable destination for students who now wished to take advantage of the HER program.

In the second year of the HER program, School B collaborated with the local education office in involving students in extracurricular activities. That year the Girls’ Club won the School B a prize for the school’s performance around girls’ education.

HER students from both cohorts have been actively participating in the Club, contributing innovative ideas to the discussions and were essential to the success of the club. Among the Club’s activities was support for students in need (accommodation and meal costs) and maintenance of school toilets.

Additionally, School B established a parent committee for Grade 12 students and HER

guardians held the posts of the President and the Secretary.



HER students in School B.

Impact on Wider Community

Just as HER students were having a profound impact on their immediate surroundings in school and at home, they were impacting and changing their wider local and global communities. They successfully applied hard and soft skills to help their communities and were recognized in the wider Ethiopian community as future country leaders.

Community Leaders

In their home communities HER students became role models that could share their knowledge and skills with others. They leveraged their mentorship knowledge to teach literacy in their communities and tutor younger students. They also shared their entrepreneurship knowledge, influencing the communities’ financial well-being. HER students felt empowered by the reproductive health training and were committed to sharing the information with their peers.

I haven’t implemented [entrepreneurship training] myself however I told to my community members and they have brought change on their business.

One of the HER girls was doing voluntary work of teaching 18 mothers from the community to read and write. She managed to help 14 of them to read and write.
(HER program coordinator, School B)

I have no word how to express my appreciation on the reproductive health training. The training covers topic matter that is prohibited to speak it out loud in our society. I will not keep the reproductive health training for myself. I will share it for my family, neighbors, and friends.



City Leaders

HER students were invited by the Network of Ethiopian Women Association (NEWA) to run a 5km women's running event. NEWA reserved 20

spots for HER students from both cohorts and all participating students enjoyed the experience and expanded their network.

Country Leaders

Seven HER students (two from Cohort One and five from Cohort Two) participated in a 3-day leadership, advocacy, and capacity-building workshop under the "Girls' Voices Initiative", organized by Let Girls Lead in collaboration with UNICEF. The goal of the workshops was to allow 35 visionary girl leaders from Ethiopia to engage in discussions and influence the inclusion of girls into the United Nations' post-2015 development agenda for Ethiopia.

This Initiative will amplify the voices and power of girls to influence the United Nations' post-2015 development agenda by supporting 30-35 girl leaders to strategically engage with key national decision-makers to support the Girl Declaration in Ethiopia. [...]Through direct engagement, high-level meetings, and strategic communications campaigns led by these 30-35 girl leaders, Let Girls Lead will ensure that girls' needs, potential, and priorities influence the post-2015 development agenda at the country, regional, and global levels. (Let Girls Lead Application)

HER students from both cohorts comprised a fifth of all workshop participants and were the only representatives from their schools. For the workshop, students travelled to Bahir Dar, a city in northern Ethiopia, together with representatives from IIE and their schools. All parents allowed students to take advantage of the opportunity, which highlights their level of trust in and support for the students.

The three days training I got through Girl's Voice Initiative was amazing. It helped me to see my internal personality which I was not aware of. Before the training I used to think that to change the life style of Ethiopian women and help them to overcome the challenges they face in life, it is must to be a positional leader or be in a prominent position in the community. But after the training I learnt that I myself can make a change. The training also told me that our country, Ethiopia, is emerging great girl students with full of dreams and I feel proud to be considered as one of them.



CONCLUSION

It is hard to overestimate the HER program's impact on its participating students. The program's achievement went beyond the initial objective to prepare students for university. Instead, the program prepared these young women for a lifetime inspired by education and commitment. HER students graduated from the program with vision, hope, determination, and practical skills to change their communities and realize their dreams.

The comprehensive approach to girls' education taken by the HER program ensured sustainability and continuity of change that went beyond the immediate individual student impact, demonstrating the multiplier effect of the program. Based on research that indicates the importance of school and home environments for girls' education, the HER program ensured that the program incorporated activities to influence these environments. The change in the school and home environments had a two-fold objective: it provided a supportive atmosphere for the HER students during the program and ensured this enabling atmosphere for the next generations of female students.

The evaluation team will continue to follow HER Future students until their graduation from university. The evaluation of HER Future will provide a unique opportunity to measure the long-term impact of the HER program. Additionally, the evaluation team will follow HER students who did not matriculate to university to learn about their achievements and career plans.

The best practices and lessons learned presented in this section are based on the evaluation findings. They go beyond the program impacts discussed in the report and cover overall program implementation. These findings are beneficial for future iterations of the HER program; for IIE's future programming in gender and education; and for any other organization planning a similar program.

Best Practices

Focus on personal growth. Program components related to personal growth had a greater impact on the participants than was anticipated. This was a much-needed area of development that deeply affected HER students' thinking, opinions, plans, and behavior.

Involve all stakeholders. Programs aimed at gender equality and education must research and involve all the relevant stakeholders; else they will be limiting their success and foregoing lasting program impact on their direct beneficiaries and related communities.

The HER pilot program worked closely with the program participants and accounted for their opinions in programming. It improved the program design and results and contributed to developing participants' leadership qualities. In the second year of the HER pilot program, the program team actively involved the guardians of the HER students. Through engagement, the program team was able to manage the initial lack of cooperation with the program and positively impact guardians' relationships with the HER students and their attitudes and knowledge about girls' education.

Leverage alumni network. The HER program team reached out to the alumnae of a previous IIE program in the area to mentor HER students. Having IIE alumnae as mentors ensured continuity of knowledge, gave alumnae an opportunity to give back, and inspired HER students to think of ways they can contribute to the community. Engaging the alumnae also provided a model for how other IIE programs can leverage their alumni networks to further the Institute's mission and programs.

Take advantage of external opportunities. The HER program was flexible and open to new program activities and opportunities which allowed HER students to participate in a unique event with Let Girls Lead and



UNICEF. The second year of the program overlapped with the release of the United Nations' 2015 Sustainable Development Goals. To incorporate voices of young females, Let Girls Lead and UNICEF partnered to create the "Girls' Voices Initiative", bringing together 35 visionary girl leaders in each target country, HER students among them.

Assist alumnae in the transition. The emphasis on community engagement and the close relationship with young HER students encouraged the HER program to consider the long-term responsibility IIE has to them after the program. As a result, IIE created a new program called HER Future to support HER students in university. For HER students who were not accepted in university, the HER program assisted in finding scholarship opportunities for vocational training.

Lessons Learned

Conduct extensive research on the proposed sites (or schools) for program implementation and consider these alongside the expected program outcomes. The Addis Ababa Education Bureau had control over which school sites were selected for the HER program. The HER program team provided criteria for school selection and the Bureau recommended several potential schools. The HER program team conducted interviews with the school principals to introduce HER, learn more about the school population and academic emphasis and determine their interest in participating in the program. Based on these interviews, two high schools were chosen that reached the target population and had the required buy-in from the school administration to implement the program effectively. Both schools were located in impoverished areas and were in need of additional support; however, as the program showed, there were school differences that affected program outcomes in the schools.

One of the schools (School B) was located in a semi-rural area and was low performing, whereas the other school (School A) was urban and had won numerous awards for its academic performance. The second school also had less gender disparity in academic outcomes. As a result, the magnitude of the program effect was very high in the first school and much lower in the second school.

This lesson is particularly important for programs that depend on government agencies for site or participant selection and pilot programs that base their program design on the magnitude of the effect of program components.

Research background statistics on relevant external factors. In the program design, it is best to identify external factors that are critical to program implementation early on and conduct research into how they may affect program implementation. This will allow for informed decision-making on how best to mitigate programmatic challenges that may arise because of such factors.

Initial HER program selection took place in grade 10, which did not take into consideration the potential effects of the grade 10 National Exam. These exam results determined which students continued to upper secondary education. According to the Ethiopian Ministry of Education, over half of female students did not pass the exam and exited the education system (EMIS, 2014). Although the HER program provided exam preparation classes for two months, fewer HER and comparison group students passed the exam than was anticipated. In the lower performing school the exam outcomes were similar to the national statistics. Consequently, the HER group was supplemented with students from the designated reserve and comparison groups and new students were recruited into the comparison group. For the second cohort the recruitment was moved to after the exam but it rendered some candidates ineligible for the program and also affected the program schedule.

Perform needs assessment for programmatic areas new to the organization. The HER program was the first IIE experience in conducting a program with a direct tutoring component in Ethiopia. Program experience



showed that an academic intervention within an existing education system requires comprehensive, systematic investigation into current theories and approaches on how to best increase students' academic performance and how to incorporate these strategies effectively into the academic program component. There are many factors influencing academic performance and a localized intervention needs to study the specific factors contributing to students' performance in the specific geographic area to address them in the best manner. For example, if teachers are encouraging rote learning, teacher training focused on student-centered learning and pedagogy may have more effect on grades than additional tutoring hours.

Identify for the comparison group early on how they will benefit from the program. In comparison evaluation designs, it is advisable to plan beneficial activities for the comparison group and notify them about such activities in advance. The in-depth and intensive approach of the HER program did not allow for engagement of the comparison students during the program implementation phase as this engagement would potentially affect program outcomes. The only time the comparison group could receive any training was after the completion of the HER program, at which time they participated in the reproductive health training.

Further, since the first iteration of a pilot program has many challenges and requires continuous fine-tuning and adjustments on the part of the program implementation team, it was not always possible to determine at the outset the specific form of engagement and benefits available to the comparison group after the conclusion of the program. For comparison group students, who applied to the program but were not selected for participation, additional contact beyond the evaluation surveys would have helped elicit further engagement on their part.

Despite all the challenges of the comparative design, it is important to not lose sight of the group who are not immediate beneficiaries of the program, to the extent possible inform them of any benefits awaiting them and consider some level of engagement during the program implementation that would not interfere with program outcomes.

Manage negative impact. The program team should monitor the climate around the program participants and coordinators in schools. On the student side, several HER students noted that some teachers stopped helping them as much once they began receiving assistance from the HER program. On the teacher side, some teachers benefitted from the program because they were selected as tutors and received additional payment for their work with the program. This caused resentment towards the program on the part of other teachers who felt left out. This resentment was also noted by school program coordinators. The HER program team raised these concerns with the school principals who then conveyed them to the school staff. Additionally, program coordinators in schools discussed the issues with the teachers who had expressed resentment. The coordinators informed them about the program and asked them to be a part of the solution. In addition, the school teachers who tutored the HER students also engaged their other colleagues in conversations. While this may not have fully resolved the problem, every attempt was made to minimize it.

If there are any negative feelings towards the program in the schools, the program team should do their best to manage them and protect their participants and other stakeholders.

APPENDIX I. PROGRAM IMPLEMENTATION

This appendix outlines the key components of the HER pilot program for Cohort One that took place in 2013-2015. The appendix also includes a section on program satisfaction and reflections from HER students and key stakeholders on program implementation.

Program Impact

HER students perceived the greatest impact of the program on their personal growth, which was indeed the area the HER program influenced most. Academic achievement was marked as the lowest area of program impact, which also aligns with the evaluation findings.

HER students indicated that their plans for future study were not impacted as much. The HER program goal to prepare students for university aligned with HER students' pre-program ambition to continue their education in university. Therefore the HER program would not have changed their plans greatly, but rather helped them refine their education goals.

HER students perceived the most program impact on their personal growth.

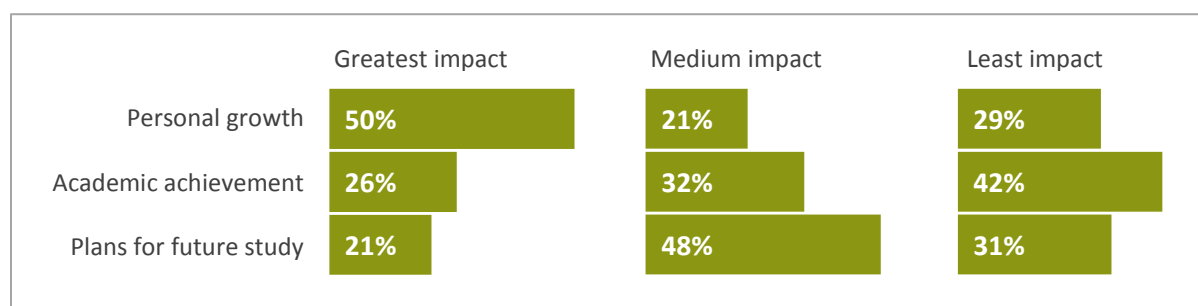


Figure 16

Program Description

The HER program provided HER participants with two years of a full financial scholarship that included a monthly program stipend, uniforms, books, and eyeglasses. The mentorship component of the HER program took place in the second semester of Grade 11 and was substituted with the Inspiration Speaker Series in Grade 12. The tutoring component of the HER program was started in the second semester of Grade 11 and continued to the end of the program. Enrichment trainings took place throughout the program.

The **scholarship component** of the HER program included financial support for school needs. At the beginning of each school year, all HER students received uniforms and books for the academic year. HER students received monthly stipends to alleviate the costs of school transportation and personal supplies. Training in financial literacy was provided at the beginning of the program by Zemen Bank to instruct students how to use their debit cards and manage their bank accounts. Medical professionals came to each school three

times to examine the HER students' eyesight. In the first year of the program, 22 of 100 students received glasses and 21 student received glasses in the second year. Doctors also advised students on proper nutrition and eye sanitation.

The purpose of the **mentorship component** was to match HER students with female role models who have been successful in the Ethiopian higher education system. During the spring semester 2014, mentors were recruited among alumnae of IIE's Ethiopia Women's Leadership Program

(EWLP), a program for young female leaders studying women's health, education, and economic empowerment in universities in Addis Ababa. The mentors visited their mentees in their schools twice a month to discuss various topics, including study skills, time management, university studies, academic excellence, and reproductive health.

The Inspirational Speaker series were developed based on students' feedback about mentorship sessions. Whereas mentorship was led by young university students, Inspirational Speaker series offered them an opportunity to interact with accomplished Ethiopian women. Speakers were selected from a book published by the Network of Women's Associations on biographies of 64 exemplary women in Ethiopia. Three speakers visited the students in each school consecutively throughout grade 12. Each speaker talked about her path and then had a Q&A with HER students for two hours.

The tutoring component provided academic support to HER students in key subjects: English and Mathematics. The students were tutored in three additional subjects specific to their track of study: social or natural sciences. Teachers were selected for tutoring based on students' preferences and their availability. In grade 11 the tutoring sessions took place in April and May 2014, for two hours six days a week. Based on the students' feedback, in grade 12 tutoring sessions took place four days a week throughout the whole academic year.

HER students participated in **Enrichment trainings** provided by the program: advanced English language, leadership and life skills,

entrepreneurship, and reproductive health trainings.

In the summer leading up to grade 11 teachers in each school conducted **Leadership and life skills trainings** based on a curriculum designed by the HER program team. The HER program team personally trained teachers to implement the leadership training module.

HER students received three **English language trainings** offered by volunteers in a local English training center in the summer before upper secondary school and in summers after grades 11 and 12. The training focused on students' conversational abilities and was a change from the English classes and tutoring sessions in school.

Following their first year with the program, HER students participated in a two-week intensive **Entrepreneurship training** provided by a local organization Women in Self Employment (WISE). Training covered topics related to business and financial management and financial literacy.

Reproductive Health training took place in the summer after secondary school graduation. All HER guardians allowed their HER students to attend the training. The training was led by a nurse and covered a range of topics related to woman's health.

The HER program also offered the Reproductive Health training to the comparison group students to express appreciation for their participation in the study. Thirty comparison students were able to join the training.

Value of Program Components

HER students evaluated each program component based on its usefulness for their academics or personal growth and non-academic learning. Twelve students thought all of the HER program components were *very useful* to their studies and fifteen students agreed the same about their usefulness for personal growth. School supplies, stipend, and leadership training were the most useful for both academics and personal growth.

HER students highly valued all program components with minor variations.

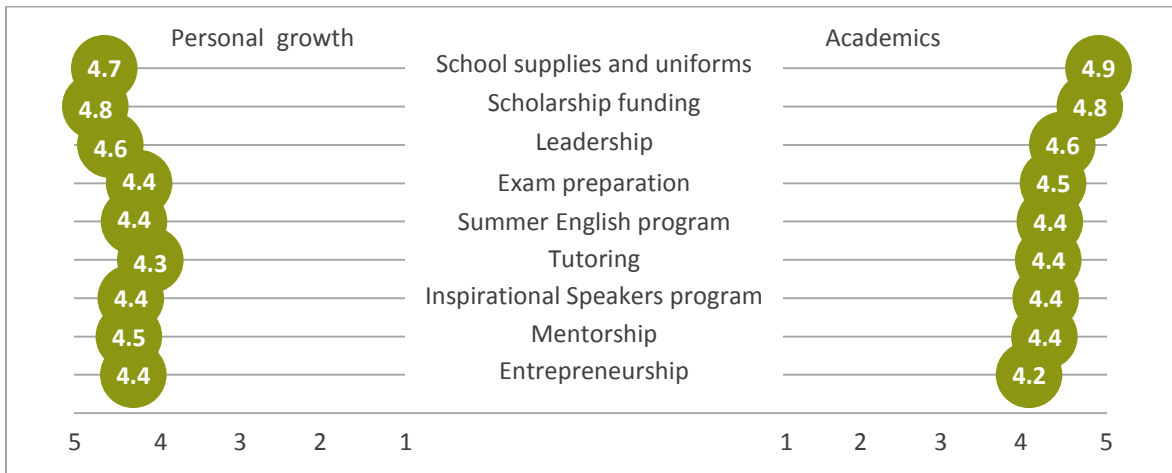


Figure 17

The following sections discuss students, guardians, and coordinators’ feedback about the program components. They are meant to add program design considerations to the program findings.

Scholarship

The financial scholarship (monthly stipend) was overwhelmingly recognized as the most useful part of the program. This was an anticipated finding because all HER students were selected based on their disadvantaged economic standing.

[The HER program] improved my education status and having an economical support makes me to focus on my school only.

I save her money in the bank to purchase her a condominium from government. (HER guardian)

We had a chance to speak to their parents and all of them told us that they had such a challenge of providing them with things they needed but now that economic burden has been alleviated. (HER program school coordinator, School A)

Uniforms and School Supplies

The uniforms and school supplies were considered the second most useful program component. Having school supplies helped students give all of their attention to their studies. When students spoke about the financial and material support they always mentioned the relief it brought to their parents and the feeling of self-respect students derived from it. This finding points to the importance that guardians may place on the direct and indirect costs of schooling for their female students.

My father is now proud of me because I am able to cover my costs and I am not bothering him to buy me this and that.

I want to express my gratitude for purchase of supplementary books. I will keep it properly because it will be an asset for my grandchildren. (HER guardian)

Mentorship

The mentorship component had a strong impact on a majority of the students. When asked about lessons they learned from their mentor, HER students each listed several. The most mentioned lessons related to self-confidence and persistence when confronting challenges. Others included decision making, time management and knowledge about university life. HER students also learned to express themselves freely, be good friends without giving in to peer pressure, and have open discussions with their families. For detailed information on the mentorship component refer to Midterm report.



HER students at a mentorship session.

Inspirational Speaker series

All students enjoyed the Inspirational Speaker series. Students who noted a more positive view of their future because of the Inspirational Speakers also scored themselves higher on leadership scale. Please refer to the Inspirational Speaker highlight in the Personal Growth chapter for an example of a Speaker's visit.

The three Inspirational Speakers were real role models for my future life. These ladies are women who threw away backward thinking; 'I can't do it!' and changed to 'I can do it!' Getting the opportunity to listen these three women live gave me a spirit of courage, success, strength and, I can do it!

HER students overwhelmingly benefited from the Inspirational Speaker series.

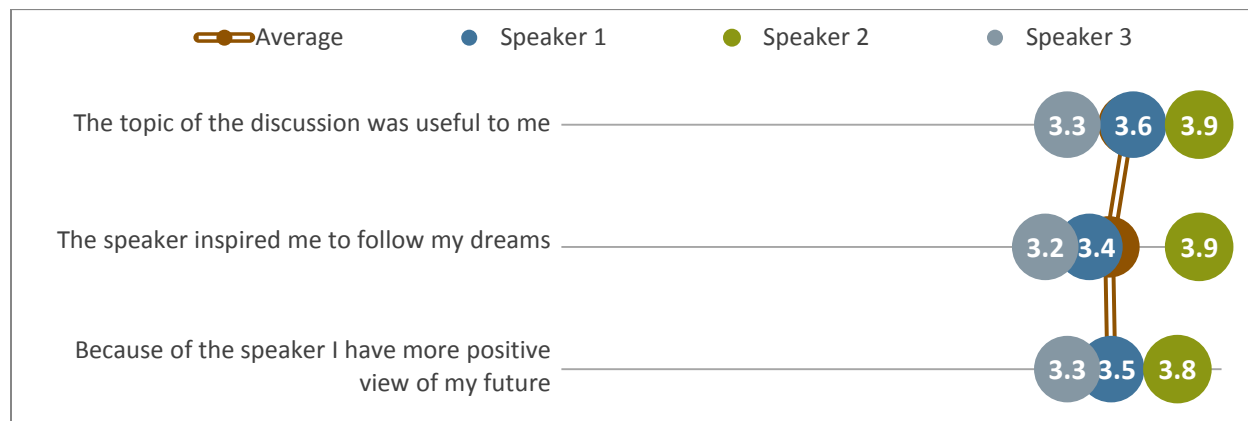


Figure 18

Tutoring and Exam Preparation

HER students in both schools took advantage of the tutoring component, with an average attendance rate of 93%. In the last semester of secondary school the tutoring component was substituted with exam preparation, which had the

same teachers and schedule but different curriculum focus. In School B students continued attending the tutoring sessions but in School A the attendance rate dropped significantly. This could be because School A had its own exam

preparation organized for all students and some of the HER students preferred to attend those classes.

Exam preparation class helped me to do well in the National Exam. This is because the teachers were focusing on working different exam sheets so that we will be ready for the exam. But I should also express that it was somehow boring because we were expected to stay late in the school.

I benefited a lot from the component. Mostly on English and Math subjects because the teachers were better than my normal class teachers and they delivered the courses seriously.

To be frank, it gave me hard time because I didn't get enough study time but it supported me on my class participation and doing well in the National Exam.

Students' perception of tutoring was generally positive. Despite positive opinions, tutoring did not have a significant effect on GPA or National Exam scores.

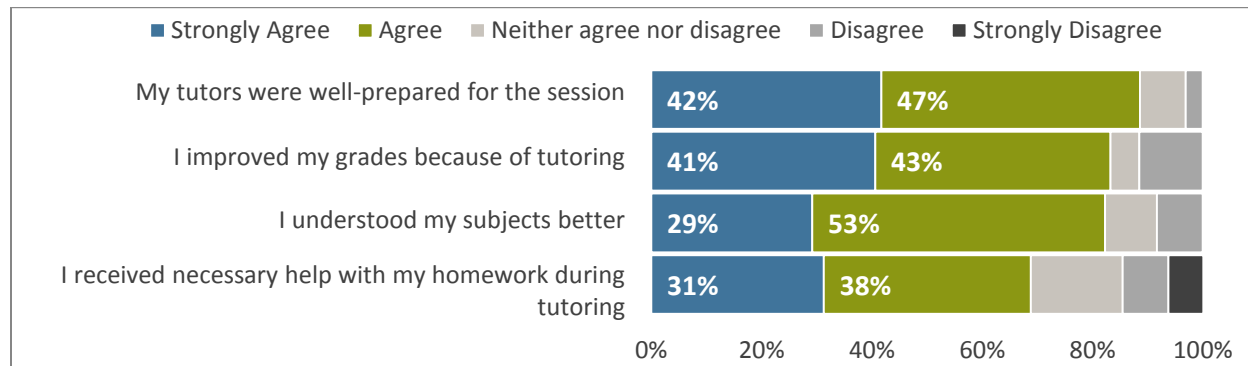


Figure 19

Enrichment trainings

Program components related to personal growth, such as enrichment seminars, had the most impact on participants. HER students learned to value themselves as human beings and young women. They gained self-respect and the ability to respect opinions different from their own. The outcomes and impacts related to enrichment trainings are discussed in the Personal Growth and Social Impact chapters.

Leadership and Life Skills Training:

The leadership training has helped me a lot in changing myself. [...] And I am in equal status as everybody else around me and achieve anything I want. It has shown me that I can survive on any challenges that might come across.

English Language Training:

Before English language course I could listen, read and write English but very shy to speak. After getting the training I am able to speak in front of thousands.

Previously I had no idea that a dictionary could be used to study more vocabularies but now I know that it has more benefits than simply defining words.

Reproductive Health Training:

I believe the training will help me like a light for my day to day life. [...] Thus I can also say that the RH training helped me as a foundation of my life.

[The training] helped me how to cope up with challenges I may face in young age. In my university life I will face many difficulties only because I am a girl, but the training equipped me how to protect myself from bad habits and become successful.

[This] training is a crucial training that every society should get but mostly for young girls. This is because we are exposed for different challenges and will easily fall on challenges. The training helped me how to cope up challenges I may face and gave me information on contraceptive methods.

Satisfaction with HER Program

HER students were largely satisfied with the HER program. Almost all of them would recommend this program to their friends. Some have already done so and their younger sisters and close friends are part of Cohort Two. HER students also

indicated their interest in applying for other IIE-managed programs. Meanwhile, the HER Future program provides an opportunity for HER students to receive support throughout their university studies.

HER students valued the program but had concerns with the implementation.

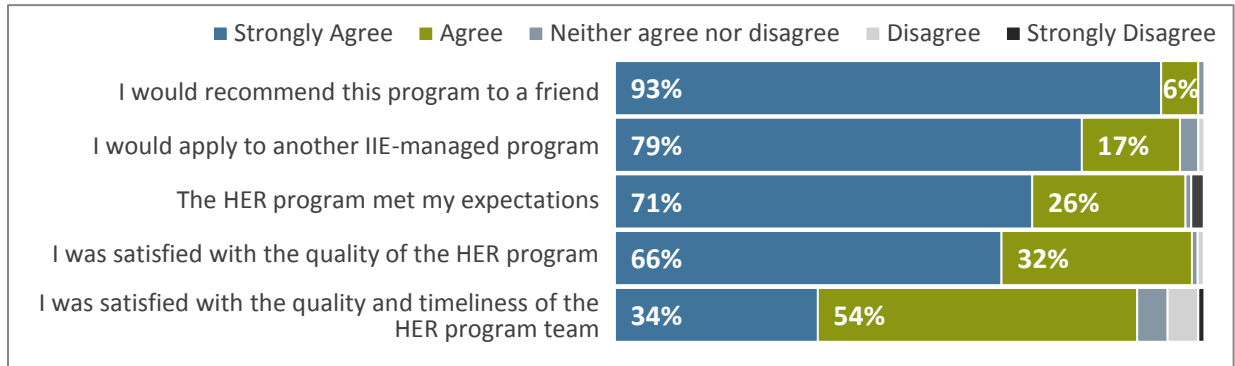


Figure 20

HER students had conflicting opinions about the quality and timeliness of the HER program team. These opinions rightly reflect the pilot nature of the program, where a lot of learning was happening on the ground. The HER program team continuously improved the program by responding to the emerging challenges, incorporating the recommendations from midterm process evaluation, and accounting for the participants' direct feedback. HER students appreciated the program team's effort and HER guardians share their gratitude towards IIE and the HER program team.

I don't find a word to express my gratitude for what you are doing to my sister. Other than feeding her, I would have done none of what you are doing to my sister. (HER guardian)

I want to thank HER program organizers Ethiopia and Miriam. I want to appreciate the effort you are exerting to make us all successful. Above all the things you do, I value most your kindness in listening to our problems and sharing our deepest emotions.

APPENDIX II. EDUCATION CONTEXT

An understanding of the state of secondary education in Ethiopia is important as a contextual point for the HER program and its consequent achievements. This chapter first discusses the Ethiopian primary and secondary education system. Then it introduces the two participating schools in the HER program with a focus on their academics and infrastructure. This school analysis is based on school records and school surveys conducted in June 2014 and October 2015.

Country Context

In the past 20 years Ethiopia has made great strides in education and in achieving gender parity in education access. With an approximate population of 94.1 million in 2013, a key development has been the large expansion of access to primary school (Joshi and Verspoor, 2013). This expansion has led to an incredible increase in primary school attendance by millions of students; however, enrollments in secondary education continue to lag (Joshi and Verspoor, 2013). There is a growing gap between primary and secondary access, showing a growing need for programs such as the HER program that address secondary school enrollment.

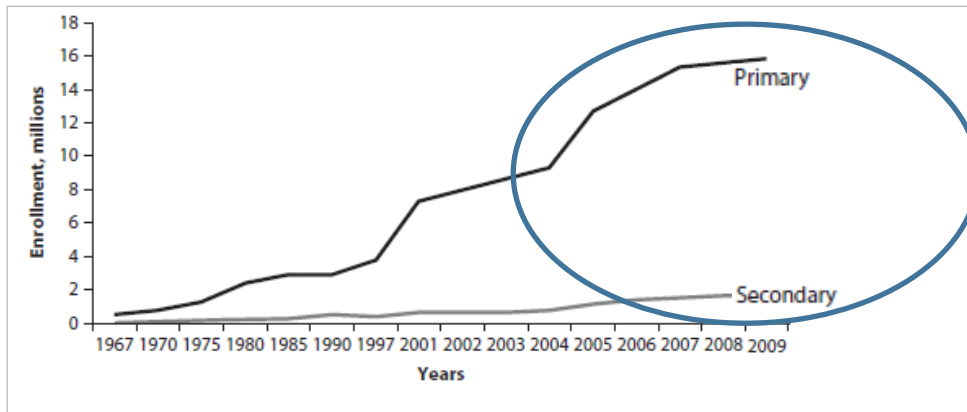


Figure 21. Education Enrollment Rates in Ethiopia, 1967 - 2009

Improvements in access to primary education have translated into growing literacy rates for youth (age 15-24): 63% of males and 47% of females are literate. These rates are noticeably higher in overall literacy than the national average, which is 39% of all adults (UNICEF, 2014).

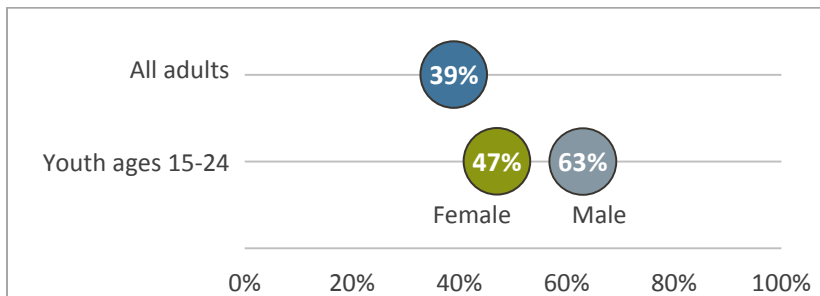


Figure 22. Youth and Adult Literacy Rate in Ethiopia, 2013

Across the nation, approximately six women are literate for every ten men. This gap is much lower among youth as well. Students who enter secondary school are more prepared than ever before; however, the current secondary education system and enrollment structure have created challenges for many students, especially girls, to succeed.

Secondary Education System

As of 1994, Ethiopia adopted an “8-2-2” education system structure (Joshi and Verspoor, 2013). The first eight years cover primary education, followed by 2 years of general secondary education, sometimes called lower secondary or first cycle secondary (grades 9-10). Following these two years, all students take a national examination, determining if students can continue to the preparatory level of secondary education, also called upper secondary or second cycle secondary (grades 11-12). Following the end of grade 11 schools again hold examinations for students to advance to grade 12. While these examinations are not standardized at the national level, they are used as a benchmark for students to be promoted to grade 12. Following grade 12, students sit for the second national examination that determines their eligibility to proceed to tertiary education. Those who do not pass but have high academic standing may enroll in vocational training schools. The majority of students who do not pass the grade 10, 11, or 12 exams exit the education system.

The quantitative data indicates that these examinations have a significant effect on enrollment rates in the upper secondary system. Enrollment rates drop dramatically in the second cycle (or upper secondary) (Joshi and Verspoor, 2013). Enrollment rates differ by region: Addis Ababa, the capital, has the highest gross enrollment rates in upper secondary; however, it is important to note that even these are less than half of the lower secondary rates.

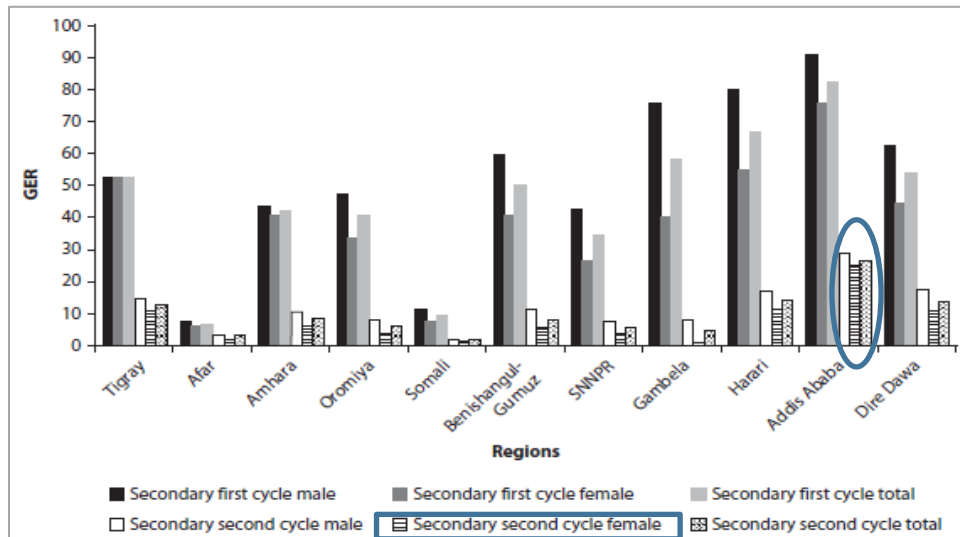


Figure 23. Secondary Education Gross Enrollment Rate, 2009-2010

According to the Ministry of Education, the gross enrollment rate for upper secondary schools is 9.1% – a significant drop from 38% in the first cycle of secondary school. The primary reason for this low rate is the national examination in grade 10. According to the most recent statistics released by the Ethiopian Ministry of Education, 54% of students who took the grade 10 exam in the 2013/14 academic year successfully passed: 61% of males and 45% of females. Over half of the female students from lower secondary exit the education system after grade 10 as a result of failing the national examination.

It is estimated that of those who pass the exam, often only the top 20% are allowed to attend an upper secondary school on the path to higher education (Joshi and Verspoor, 2013). The economic status of youth also affects their chances to proceed to upper secondary schools (UNESCO, 2013).

Finally, the quality of education remains a concern at the upper secondary level. The dropout rates for female students are high at 16.8% in upper secondary school (Joshi and Verspoor, 2013). This signifies that students in Ethiopia not only encounter obstacles getting into upper secondary school, but they continue to face obstacles proceeding through and successfully finishing this level. These challenges speak to the significant need for preparatory and enrichment programs for students at the upper secondary level, particularly girls.

Participating Schools

The HER program enrolled participants from two schools in Addis Ababa city: School A and School B. This section takes a closer look at data from these schools to define the educational context of HER students.

School A is located in the middle of the capital of Addis and provides instruction in grades 11 and 12 for students from various lower secondary schools. It is located in the middle of a busy inner market called “mercato”, noted by some as the largest open-air market in Africa. School B teaches both levels of secondary school: grade 9 to grade 12. It is located in the Akaki Kality sub city of Addis Ababa, approximately one hour away from the city center in a semi-rural area. The location of the schools significantly affects management and structure, particularly in the case of School B.

Both schools offer education to students of both genders from middle and lower income populations. School A serves an urban lower income population and is funded through the Ethiopian Government and fundraising (80% and 20%, respectively). School B serves an urban marginal income population and is funded mainly through the Ethiopian Government with 5% of parental contributions.

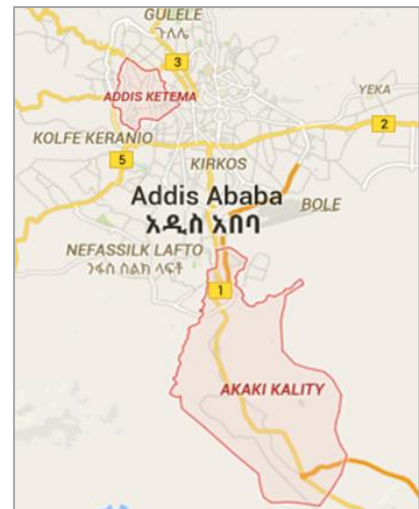


Figure 24. Location of HER schools in Addis Ababa

About School B school...

Students are coming from distant places so that's also a challenge. No governmental organization works on this school. IIE's just one of the first ones since it's considered to be a remote site. We're really grateful to IIE for taking and having the heart the come all the way here. (HER program Coordinator)

The school is situated in a very far place from the center of the [city]. Students usually do not have interest in coming to this school and go where they could find better transportation service. Particularly those students who are high achievers have a tendency of moving to the center of the town where better facilities are available. Once this program has been launched students are coming to this one in order to benefit from this program because it's only here that they could find such opportunity. (HER program Coordinator)

In 2014/15 academic year School A had 1,336 students in grade 12 compared to 152 students in School B. The large enrollment significantly affects the potential impact of the HER program in School A. According to the school principal in School A, there were more than 20 homeroom classes in grade 11 in the previous year, whereby each class may have had only one or two HER students. As a result, the visibility of the program in the school is much lower than in School B.

Data from both schools indicated differences in services and facilities provided. The schools had electricity, libraries, and textbooks included in the tuition cost. Both schools had running water and bathrooms with toilets; School B did not have either before the program. School A had bathrooms with toilets separate for boys and girls, which are still absent in School B. The following table provides further detail on the services and facilities present at each school.

	School A	School B
Electricity	Yes	Yes
Running water	Yes	Yes
Bathrooms with toilets	Yes	Yes
Separate bathrooms for girls	Yes	No
An office for the principal	Yes	Yes
A room for teachers	Yes	Yes
A school yard for students	Yes	Yes
A cafeteria for students	Yes	No
A kitchen	Yes	No
A library	Yes	Yes
Breakfast or lunch	No	No
Nurse	No	No
Transportation	No	No
School supplies or books	Yes	Yes

School principals in both schools were asked about the key challenges they face. School A’s challenges were related to environmental concerns and insufficient infrastructure. School A is situated in an open-air market and suffers from high sound pollution. School B’s principal was concerned with academic problems: high drop-out and low university admission rates.

APPENDIX III. METHODOLOGY

The pilot program in Ethiopia was the first implementation of the HER program; it was closely studied to measure the value-added of program activities and potential program outcomes and impacts. The HER program team worked with the IIE's Center for Academic Mobility Research and Impact on the monitoring and evaluation activities of the program. The team conducted a detailed analysis of the HER program's first cohort to capture program progress towards its goals, provide recommendations for the second cohort, and develop best practices for similar programs.

The HER evaluation team implemented a quasi-experimental design to compare the effects of the program on HER participants versus comparison students. The selection of students for the HER program and comparison group was not random. The best candidates for the HER program were chosen through an extensive selection process that aimed to maximize the potential impact of the pilot intervention. Another selection criterion was successful completion of the grade 10 exam, the final hurdle for students' potential inclusion in the HER cohort. Students deemed eligible for the program but not chosen for the scholarship formed the comparison group.

A difference-in-difference (DD) analysis was used to compare the HER and comparison groups on varying factors over time, including: academic performance, English and Math scores, measures of self-confidence and leadership, and participation in work and extracurricular activities outside of school. This analysis allowed the team to control for the inherent differences between the two groups prior to the beginning of the program, while also studying the potential effects of the HER program over time.

Data Collection

The collection of data for the HER program began prior to the program's intervention in September 2013 and concluded in October 2015. To answer the key questions posed by the evaluation, a mixed-methods approach was used that yielded quantitative and qualitative data.

Quantitative Data. The evaluation team developed seven surveys during the course of the two years of the HER program. These include: 1) surveys for the HER and comparison group students, 2) a survey for HER mentors, 3) surveys for HER parents, and 4) school surveys (Table B). Each of these instruments linked to the appropriate research questions. Surveys were translated into Amharic by the HER program team and conducted in schools using paper and pencil. The surveys were then coded in Excel and sent to the evaluation team in the United States. Data collection took place in accordance to the evaluation timeline: the baseline survey was applied prior to the start of grade 11 in September 2013, the midterm survey was administered at the end of the school year in June 2014, and the final survey was administered at the end of the school year in April 2015³. Parents were surveyed in April 2013 as part of the baseline data collection and in May 2015 for the final data collection. Mentors responded to a survey about the mentorship component in March 2014. School principals filled out the surveys about schools' enrollment, academic performance, infrastructure, and key challenges.

³ Due to National Exam taking place in May, the academic year for Grade 12 students ends in April.

Audience	Instrument	Baseline	Midterm	Final
HER group	Survey	Yes	Yes	Yes
Comparison group	Survey	Yes	Yes	Yes
HER guardians	Survey	Yes		Yes
Mentors	Survey		Yes	
School principals	Survey		Yes	Yes

HER students' academic performance data was collected from school records after each semester. National level data on national exam scores and drop-out rates was collected directly from the Ethiopian National Examination Organization in October 2015. The evaluation team also reviewed Educational Abstracts from the Ethiopian Ministry of Education and reports from the World Bank and the Brookings Institution.

Qualitative Data. The evaluation team performed two rounds of primary qualitative data collection (Table C). In September and October 2014, a senior evaluator travelled to Addis Ababa, Ethiopia, to collect qualitative data about the program. The evaluation team had already gathered some qualitative data at the end of the first academic year from HER participants, including their vision statements and learning journals. In addition, in-depth interview guides were drafted for interviews with school principals, HER program coordinators in each school, teachers, tutors, and the HER program team in the IIE office in Ethiopia. Focus group guides were drafted for discussions with HER students and guardians. All focus groups and interviews took place on the grounds of the two schools and were conducted in Amharic using simultaneous translation.

In June 2015 the evaluation team conducted additional focus groups with HER students and interviews with the HER program school coordinators. To better manage power dynamics the focus groups and interviews were conducted by a local researcher in Amharic and then he translated his notes into English. Additionally, the HER program team supplied qualitative data in form of minutes from workshops with guardians, HER student meetings, and mentor monthly meetings.

Audience	Instrument	Midterm	Final
HER group	Focus Group	Yes	Yes
HER guardians	Focus Group	Yes	
School principals	Interview	Yes	
HER program school coordinators	Interview	Yes	Yes
HER tutors	Interview	Yes	
School teachers (non-tutors)	Interview	Yes	

Various techniques were used to analyze the data collected for the evaluation. Quantitative data was analyzed using statistical analyses such as the t-test, multivariate regressions, and repeated measures analyses of variance (ANOVAs). In this report, we present the results of these comparative tests using alpha p-values. These comparative tests measure three types of differences: 1) differences over time within the HER group or the comparison group independently; 2) differences between the HER and comparison groups at one point in time; and 3) a combination of these two, meaning a comparison of differences between HER and comparison considering the passage of time. For our analysis, any statistical tests that had a p-value less than 0.05 were considered statistically significant.

Qualitative data was reviewed for cross-cutting themes.

Limitations

The HER program was a pilot and experienced several changes throughout its implementation that may have affected the evaluation process. It is important to note the following limitations while considering the key findings in this report.

- Data collection, especially from the participating schools, took significant time and resources and often went through several rounds of cleaning and analysis. The first challenge was that some HER and comparison students did not have their school records and therefore had missing data on their academic performance. This was further complicated by the fact that in one school, the HER and comparison students transferred from lower secondary school Dilachen to upper secondary School A, which did not have their old school records. Finally, the schools did not have computerized database and had difficulty providing standardized information on their school-wide academic performance. The HER program team in Ethiopia worked tirelessly to get the correct school data from the two schools but this seriously delayed the data analysis and in some occasions the evaluation team made decisions to not use particular data that seemed unreliable.
- The HER program experienced some changes in its study population during the first year of the program. While 50 students were chosen from each school to participate in the HER program based on a detailed selection process, not all 50 of these students passed the grade 10 exam. As a result, the HER program adjusted its selection and some students from the comparison group were included in the HER program. The evaluation team had to reanalyze the baseline findings and surveys and reconfigure the HER and comparison group populations. Any baseline analyses presented in this report reflects these new groups.
- Two students left the HER program at the start of 11th grade. In these cases, because the program just started, HER students were replaced by two comparison students. However, since one of these replacements happened in January 2013, this student had not received some of the HER interventions and this may have affected program outcomes. Starting in the second semester, students were no longer replaced in the program and this challenge was addressed.
- The comparison group could have been affected by the intervention in several ways which could lead to under or overestimation of the program effect. Since the students study together there could be a spillover effect, where HER students share information from trainings or study together with the comparison group students. This would positively influence the comparison group's performance and personal growth. Additionally, the comparison group is composed of non-selected program applicants and it is possible that the comparison group students would attempt to perform better to compete with the selected students. Such behavior would also positively influence the comparison group's performance and hide the actual program effect. It may also lead the comparison group to misrepresent their self-confidence in the self-reported surveys. Conversely, not being selected into the program could have negatively affected self-confidence of the comparison group students, thus lowering their performance against the HER students.

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