

American Institutes for Research

Aga Khan Foundation

CARE

Discovery Channel Global Education Fund

Education Development Center

FHI 360

Howard University

International Reading Association

The Joseph P. Kennedy, Jr. Foundation

Juárez and Associates, Inc.

Michigan State University

Sesame Workshop

Save the Children Federation, USA

University of Pittsburgh



**EQUIP1 LIBERIA
GIRLS' OPPORTUNITIES TO ACCESS LEARNING (GOAL)**

**Endline Research Findings
Executive Summary**

November 2010–November 2013



Submitted by:
American Institutes for Research®

A partnership with:
Forum for African Women Educationalists (FAWE)
Search for Common Ground

December 2013

U.S. Agency for International Development
Cooperative Agreement No. 669-A-00-11-00015
Through Leader Award No. GDG-A-00-03-00006-00

American Institutes for Research
1000 Thomas Jefferson St., NW
Washington, DC 20007
www.equip123.net

Girls' Opportunities to Access Learning (GOAL)

Endline Research Findings: Executive Summary

December 2013

The authors' views expressed in this document do not necessarily reflect the views of the Millennium Challenge Corporation, the United States Agency for International Development, or the United States government. This work was made possible under Cooperative Agreement No. 669-A-00-11-00015 through Leader Award No. GDG-A-00-03-00006-00.

Acknowledgements

The American Institutes for Research[®] (AIR[®]) would like to thank the Millennium Challenge Corporation and the United States Agency for International Development for their support and leadership throughout the design, implementation, and evaluation of the Girls' Opportunities to Access Learning (GOAL) project. This work would not have been possible without the support and partnership of the Liberia Ministry of Education, through the Girls' Education Division, and our partners the Forum for African Women Educationalists (FAWE) and Search for Common Ground. Data collection and quality assurance could not have been achieved without the support of the Liberia—Monitoring and Evaluation Program (L-MEP). AIR would also like to thank Lisa Deyo, GOAL Chief of Party, for her leadership throughout the project. AIR thanks Jane Schubert, Howard Williams, and Johannes Bos for their critical leadership, support, and review of the GOAL Endline Research Findings. AIR also thanks Daniel Sherman, Kathryn Fleming, Hannah Reeves, Burhan Ogut, Matthew Murray, and Phil Esra for their work on the analysis and development of the GOAL Endline Research Report.

Acronyms

AGSP	Ambassador Girls' Scholarship Program
AIR	American Institutes for Research
EFA	Education for All
FAWE	Forum for African Women Educationalists
GER	Gross Enrolment Rate
GOAL	Girls' Opportunities to Access Learning
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome
IMF	International Monetary Fund
IR	Intermediate Results
M&E	Monitoring and Evaluation
MCC	Millennium Challenge Corporation
MDG	Millennium Development Goals
MOE	Ministry of Education
NER	Net Enrolment Rate
NGO	Non-Governmental Organization
PTA	Parent Teacher Association
SFCG	Search for Common Ground
SIP	School Improvement Plan
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
UNMIL	United Nations Mission in Liberia
USAID	United States Agency for International Development

Executive Summary

I. Introduction

The three-year Girls' Opportunities to Access Learning (GOAL) project sought to address the low primary school enrolment among Liberian girls that continues to persist years after Liberia's 14-year civil war. The program was a Millennium Challenge Corporation (MCC) and USAID-supported Threshold Program, implemented between November 2010 and November 2013 by American Institutes for Research (AIR), the Forum for African Women Educationalists (FAWE), and Search for Common Ground. The project aimed to promote girls' school enrolment and attendance, and their completion of school, by engaging communities in supporting girls' education, providing grants to school parent-teacher associations (PTAs), and providing scholarships directly to girls.

Although there is a large body of research that describes the institutional and social barriers that impede girls' education, there has been considerably less research on strategies to overcome these barriers. An extensive review of the evidence on girls' education programs (conducted by the Population Council in 2009) identified two possible strategies: (1) providing direct cash and in-kind scholarships, and (2) providing PTA capacity building paired with school improvement grants. It was not clear whether (and how) these two strategies might support each other when implemented together. The GOAL project provided the two types of interventions separately and in combination in different groups of communities, and performed statistical analyses of the costs and cost-effectiveness of the different approaches. Through the interventions and their evaluation, the GOAL project both directly assisted girls in their primary education and contributed to the current research on girls' education.

II. Background

The 1989–2003 civil war disrupted all aspects of Liberian society, government services, and daily life, and the country's education system was no exception. The Liberian government has made considerable progress since the war ended in 2003, but the education sector continues to suffer from insufficient funding, a limited pool of qualified teachers, and fragmented systems and oversight. Although the Ministry of Education (MOE) introduced compulsory and free primary education in 2006, the government estimated that Net Enrolment Rates (NERs) were only 44 percent—and as low as 40 percent for girls—in 2009. In part, this reflects Liberia's history of male overrepresentation in its education system. According to the 1974 School Census, girls made up just 36 percent of enrollees at the primary level at that time. Now—almost 40 years later—the proportion of girls in primary school is still only 44 percent (as reported in a draft of Liberia's 2012–13 School Census).

III. GOAL Program Description

The GOAL project's aim was to improve girls' enrolment, attendance, and retention in 40 primary schools in two districts each in Lofa, Bong, and Grand Bassa counties. The program's interventions were implemented between 2010 and 2013, during which time Liberia's primary education completion indicator for girls increased from 52.5 percent to 60.3 percent.

Design and Implementation of the Three Interventions

The GOAL program offered three intervention models in the primary schools participating in the program: (1) a scholarship program, (2) community mobilization through PTA capacity building and school improvement grants, and (3) a model that combined the scholarship and community mobilization programs (and provided supplemental academic tutoring to a small subset of schools). GOAL also monitored enrolment, attendance, and retention in 20 comparison schools that did not receive any GOAL interventions or services.

Intervention Model #1: Scholarship Program (10 schools)

In the first model, GOAL offered in-kind scholarships (uniforms, payment of school-related fees, and school supplies and toiletries) to girls in 10 schools, coupled with complementary services to help girls flourish as students. The scholarships sought to offset both direct schooling costs (by providing money for school fees and uniforms, for example) and the indirect schooling costs associated with not being able to participate in the local informal economy while in school. All of the female students enrolled at each GOAL school received the resources. The complementary services provided as part of this model were:

- Teachers' kits (contents included items such as dictionaries, calculators, chalk, and other supplies)
- Gender-Responsive Pedagogy training for teachers, mentors, and PTA members, which covered developing gender-responsive lesson plans, materials, and classroom set-up; using gender-responsive language in the classroom; and preventing and addressing sexual harassment
- Establishing Girls' Clubs, which were designed to provide girls direct support in addressing school-related difficulties (Girls' Club mentors received a small stipend and were provided direction about the operations of the clubs)

Throughout this report, schools in this intervention category are referred to as scholarship-only schools.

Intervention Model #2: Community Mobilization through PTA Capacity Building and Grants (10 schools)

In the second model, the GOAL staff worked to build the capacity of PTAs to support girls' primary education. Each school's PTA received a performance-based grant of up to US\$1,000 per phase to improve the school environment. These grants met the needs identified in school improvement plans (SIPs) and provided an opportunity for PTA members to work together. This process was intended to strengthen PTA planning and management skills, and to build morale and cohesiveness. PTAs used the grants to make improvements to the physical environment of schools (e.g., buying new furniture and library materials and undertaking building repairs, toilet renovation, and so on). These activities improved the school environment for all students but were designed to especially benefit girls.

The intervention provided the PTAs training in operations and management, financial management and oversight, school monitoring and evaluation, local advocacy and resource mobilization, data use, and school health. Community mobilization through PTA capacity

building also focused on engaging women as members and leaders in PTAs in order to influence household and community behavior and drive gender equity.

Throughout this report, schools in this intervention category are referred to as grant-only schools.

Intervention Model #3: Combined Scholarship Program and PTA Capacity Building and Grants (20 schools)

In 20 schools, the GOAL project provided a combination of Intervention Models 1 and 2. (A subset of nine randomly selected schools within this intervention category also received support in the area of after school tutoring.)

Throughout this report, schools in this intervention category are referred to as grant and scholarship schools.

In addition, the schools in all three program models received the following interventions:

- **Community outreach and awareness raising (through town hall meetings, drama performances, and radio messages and skits):** This was done to create an environment supportive of girls' education in all program schools and catchment areas.
- **Health interventions:** Two teachers from each school received training in first aid. Teachers, PTA members, and Girls' Club mentors (in schools with supported Girls' Clubs) from each school participated in "Water, Sanitation, and Hygiene" (WASH) training and age-appropriate trainings on HIV and AIDS and reproductive health.

Evaluation Design

To compare the relative effectiveness of GOAL's three intervention models, we addressed the following research questions:

1. **Impact:** To what extent does each program model increase girls' enrolment, attendance, and retention?
2. **Effectiveness:** What are the overall costs of each intervention, and the costs per student? What is the cost-effectiveness of each program (i.e., how much does it cost to increase enrolment by one girl)?
3. **Necessary conditions:** What contextual factors facilitate or hinder the implementation of each intervention and its effectiveness?

We employed a mixed-method evaluation design to answer these research questions. We used statistical regression methods to estimate the impacts of the scholarships, grants, and other program supports on girls' enrolment, attendance, completion, and promotion, and we analyzed cost data to estimate the cost of providing the different interventions. These costs were then compared with the estimated program impacts to determine the relative cost of a given amount of change (e.g., increasing school enrolment by one girl). We also carried out four in-depth, qualitative case studies to explore the contextual factors related to schools' and PTAs' experiences with the program interventions.

Program Implementation: Achievements, Outcomes, and Trends

GOAL provided the following resources to girls, their families, and other stakeholders within the targeted schools and communities.

Intervention Model #1 (Scholarship-Only Schools)

- This intervention distributed a total of 13,132 scholarships and 1,136 teachers' kits.
- It also provided Gender-Responsive Pedagogy training to 210 teachers, education officers, and PTA leaders, with one training session taking place in each county.

Intervention Model #2 (Grant-Only Schools)

- This intervention directly supported 29 PTAs and their leadership, community leaders, and students.
- The grant intervention funded projects that the PTAs had identified and designed through their SIPs. Over the life of the project, GOAL provided \$66,696 in grants, matched by \$12,427 in PTA cost share.

Intervention Model #3 (Grant and Scholarship Schools)

- In addition to the support, funds, and training provided to all 20 schools receiving this intervention, nine of these schools received a supplemental tutoring program that provided academic support for girls in mathematics, science, social studies, and English. Over the life of the project, 1,120 girls participated.

Additional Supports, Funds, and Training Provided to All GOAL Schools and Communities

- GOAL provided community engagement and media outreach to all 40 school catchment areas, regardless of intervention model, to raise awareness about topics central to GOAL's mission. GOAL used radio messages as a key community engagement strategy. The messages were broadcast in English and in Lorma, Kpelle, and Bassa (the dialects widely spoken in the project communities).
- 39 first aid kits were provided to GOAL program schools and 78 teachers were trained in first aid.
- 142 participants received WASH training.
- 221 participants received sexual and reproductive health training. 187 participants (including principals, clinic staff, and community health volunteers) were trained in classroom reproductive health activities.
- GOAL provided bacteriological testing and treatment of drinking water points in all 40 targeted communities.

Increasing Girls' Enrolment

Enrolment data were collected at the beginning of each semester throughout the life of the GOAL project. GOAL used three primary targets to measure its results:

1. **A 25 percent increase in girls' enrolment (3,493 girls).** In the final year of the project, girls' enrolment in Grades 2–6 in all 40 program schools was 23.2 percent higher than the baseline (increasing from 2,794 girls to 3,443 girls), which is slightly under the 25 percent target. Enrolment increased by 28.0 percent in scholarship-only schools and 49.0 percent in grant and scholarship schools, but grant-only schools experienced a decline of 17.8 percent overall. (In the comparison schools—which did not receive any GOAL support—enrolment declined by 19.5 percent.)
2. **A 25 percent increase in the number of girls who successfully complete their grade (1,847 girls).** In June 2011 (the baseline year), 1,464 girls in Grades 2–6 in the 40 program schools successfully completed the school year. In June 2013, 2,314 girls completed the year—an increase of 53.1 percent, which is far above the 25 percent completion target. Promotion rates, however, were lower. Among the cohort of 985 girls who received scholarships in May 2011 as second, third, or fourth graders, many repeated grades, and only 28.8 percent of the girls in the cohort were promoted in two successive grade levels and years.
3. **An increase of 5 percentage points (to 63.2 percent) in the attendance rate for girls in Grades 2–6.** The attendance rate for all 40 schools increased by 10.3 percentage points—from 57.2 percent to 67.5 percent—which exceeded the 5 percent target.

IV. Analysis of GOAL Impact on Student Enrolment and School Conditions

To help us identify the project's impact (and to distinguish the project from other events and interventions that may have benefited schools more generally), our analyses primarily focused on the differences in outcomes between boys and girls. The more the gender gap in these outcomes is reduced, the more likely it is that GOAL—which was designed to primarily benefit girls—is responsible for any improvements in outcomes.

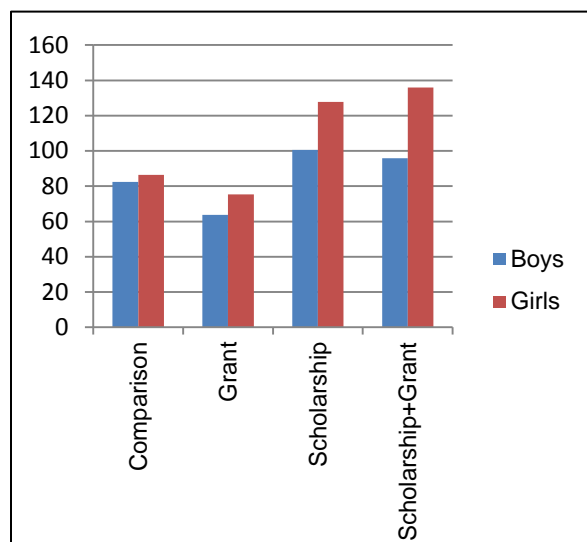
Trends in Student Outcomes

We looked at outcomes for the 40 GOAL schools based on which of the three intervention models they received, and we compared these outcomes with those of the 10 comparison schools. Exhibit 1 shows the relative change in each outcome from its baseline value.¹

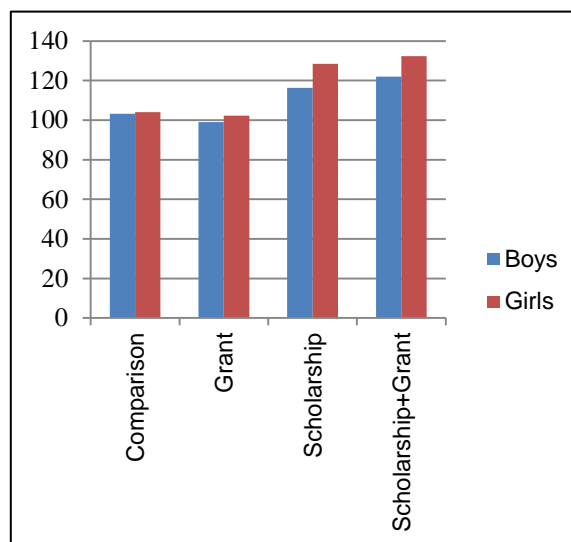
¹ To standardize the data relative to the baseline level of each outcome for each particular school, the figure shows the endline value relative to a standardized baseline value of 100. For example, if the average enrolment of boys in a school increased from 150 to 210 students (a 40 percent increase), the standardized endline value for that school would be 140.

Exhibit 1. Relative Percent Changes Over Time in Enrolment, Attendance, Completion, and Promotion by Type of Support Provided to School

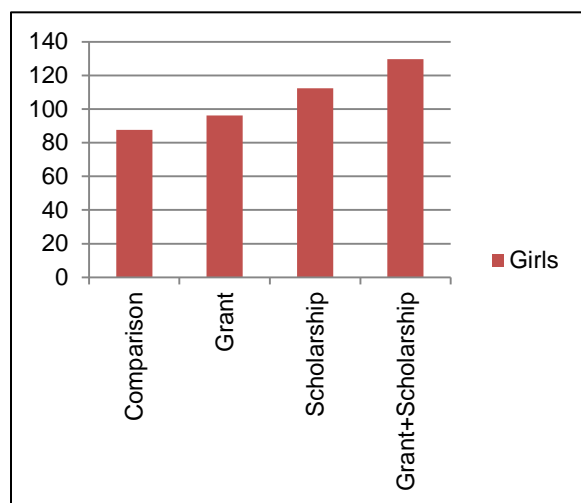
Enrolment



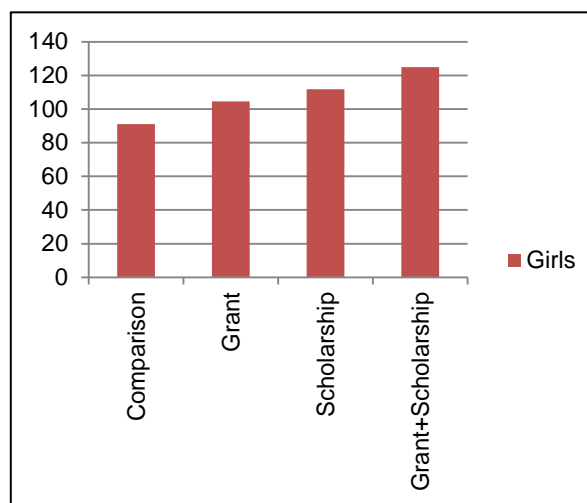
Attendance



Completion



Promotion



Source: Liberia Girls' Opportunities to Access Learning project, baseline and endline (2011, 2013)

Note: Because data for boys are not available at the baseline for completion and promotion, relative changes are shown only for girls.

Three general findings emerge from these data:

- Boys' enrolment declined in all four school categories, and there were similar declines for girls in comparison schools and in schools that received grants only. In contrast, girls' enrolment increased in schools that were offered scholarship support (either by itself or in combination with grants).

- Attendance did not change in comparison schools or schools that received grants only, but it increased for both boys and girls at schools that offered scholarship supports (alone or in combination with grants).
- Grade completion and promotion among girls improved in schools that offered scholarship support (with or without grant support) and worsened in schools that did not provide scholarship support.

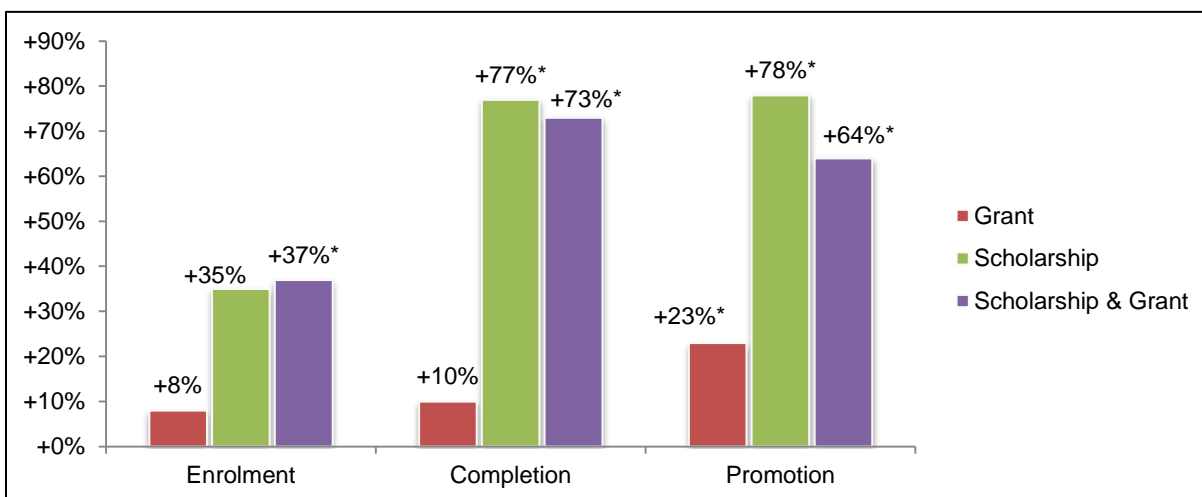
Regression Analysis of Student Outcomes

To further examine whether the observed changes were attributable to GOAL, and to establish whether these changes were statistically significant, we used regression analysis to compare changes in outcomes for girls and boys at GOAL intervention and comparison schools. Exhibit 2 summarizes the results from these analyses.

- **Enrolment:** Controlling for changes over time in boys' enrolment and enrolment in comparison schools, we estimated that GOAL increased girls' enrolment by an average of 11 girls at grant-only schools (8 percent), by an average of 18 girls at scholarship-only schools (35 percent), and by an average of 35 girls at grant and scholarship schools (37 percent). Based on these results, it appears that scholarships had a greater impact on girls' enrolment than grants (though only the increase at grant and scholarship schools was statistically significant).
- **Completion:** The regression analysis indicated that GOAL increased the number of girls who completed the school year by seven girls (10 percent) at grant-only schools, 20 girls (77 percent) at scholarship-only schools, and 39 girls (73 percent) at grant and scholarship schools. The impacts at scholarship-only and grant and scholarship schools were statistically significant.
- **Promotion:** We estimated that GOAL increased the number of girls who were promoted to the next grade by 12 girls (23 percent) at grant-only schools, 16 girls (78 percent) at scholarship-only schools, and 29 girls (64 percent) at grant and scholarship schools. The impacts at scholarship-only and grant and scholarship schools were statistically significant.

Despite the relatively small number of schools in each of the four treatment conditions (the three intervention models and the comparison group), these results provide encouraging evidence on the effectiveness of the GOAL program. The improvements appear to be driven primarily by the scholarships provided to girls in 30 of the 40 GOAL schools.

Exhibit 2. Regression-Based Estimates of GOAL Impacts on Enrolment, Completion, and Promotion



Source: Liberia Girls' Opportunities to Access Learning project, baseline and endline (2011, 2013)

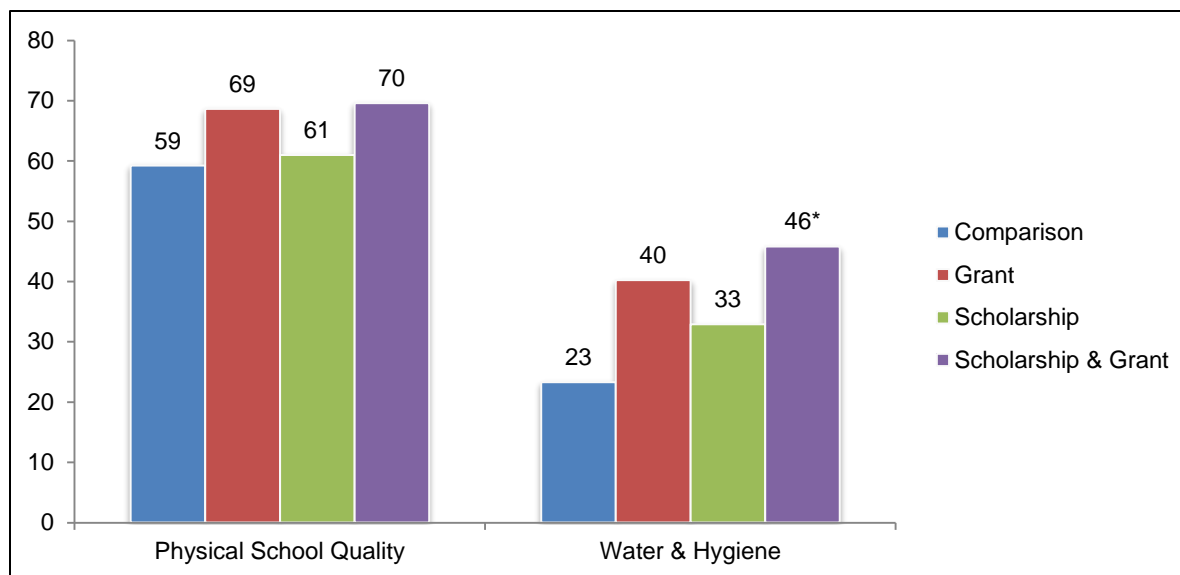
Note: Starred differences are statistically significant.

Impacts on School Conditions

In addition to examining the impact of GOAL on student outcomes, we also examined the change in school characteristics from baseline to endline across program and comparison schools. Using questions from GOAL school observation instruments, we created two scales to summarize school conditions across 16 individual observational variables. One scale (consisting of nine items) summarized the overall physical condition of the school and the other (consisting of seven items) summarized the availability and quality of its water and hygiene infrastructure.

Exhibit 3 summarizes the results from these analyses. It shows that GOAL schools generally had higher scores than comparison schools in both physical school quality and water and hygiene. The differences were more apparent for schools that received both scholarship and grants and were more pronounced for the water and hygiene scores. In addition, GOAL schools also appeared to have more visible notebooks, pencils, and textbooks relative to comparison schools (not included in the figure).

Exhibit 3. Ratings of Physical School Quality and Water and Hygiene Measures by Type of School



Source: Liberia Girls’ Opportunities to Access Learning project, baseline and endline (2011, 2013)

Note: Due to the small sample size, only the starred difference between GOAL and comparison schools was statistically significant.

V. Analysis of GOAL Cost-Effectiveness

To estimate the cost associated with an outcome (e.g., increasing enrolment by one girl) for each intervention model, we analyzed the costs of the three GOAL intervention models relative to their impacts on girls’ outcomes. The lower the cost for a given outcome, the more cost-effective the intervention is (for that particular outcome). We found the following:

- The average annual cost of providing GOAL supports to an individual school ranged from \$8,175 for a grant-only school to \$19,082 for a grant and scholarship school.
- The total annual cost of providing the interventions (including administrative expenses) ranged from \$65 per girl at grant-only schools to \$199 per girl at grant and scholarship schools. (Grants were \$1,000 per school, and scholarship payments to cover school fees averaged about \$62 per girl.)
- In an average school with an enrolment of 100 girls, increasing enrolment by one girl had an associated cost of \$1,089 at grant-only schools, \$415 at scholarship-only schools, and \$559 at grant and scholarship schools. Although the grant and scholarship combination had a greater impact on enrolments, it does not appear to have been cost-effective in increasing girls’ enrolment as a single outcome.
- The patterns of cost-effectiveness for enrolment also applied to completion and promotion outcomes: Scholarships were more cost-effective than grants.

The costs associated with staff traveling to schools to provide training and other activities were a significant expense for the GOAL program, and these costs outweighed the direct costs of providing grants, scholarships, or materials to schools. Staff costs represented about 51 percent

of total program costs, and they were highest (77 percent of total costs) at grant-only schools and lowest (47 percent) at grant and scholarship schools. These costs reflect the considerable effort required to travel to schools, provide the necessary training and support to school personnel, and work with families to encourage girls to participate and succeed in primary education.

VI. *Lessons Learned from Interviews and Focus Groups*

GOAL undertook four in-depth case studies at GOAL schools to better understand the factors that affected the implementation of each intervention, and to provide contextual information to explain why particular interventions might have been more effective. The four case study schools were the Kpanay Town, Saturday Town, William R. Tolbert, and Gorlu public schools. Selection was based on the following criteria:

- Representation of each project county
- Representation of schools receiving different intervention models
- Representation of schools with and without prior experience in organizing Girls' Clubs

The relative contribution of each intervention varied by context. Patterns in girls' enrolment, attendance, and completion that resulted from the intervention are not clear in any of the case study schools, and, as a result, it is difficult to tie specific elements of the interventions to effectiveness. However, common themes run throughout the case studies with similar components.

The case studies show that stakeholders who respond positively to the intervention facilitate the implementation process. Strong leadership, parental buy-in, and cooperation from the female students are all necessary conditions. Strong community leaders are able to engage parents, who then influence their children's ability to attend school (instead of farming, for example). Interviewees indicated that external assistance (like GOAL) was necessary in the community, but they also gave numerous examples of other projects that were unsustainable once the external implementer pulled out of the community. The lack of sustainability in past programs indicates the importance of local, community-based leadership, rather than temporary, external solutions. The key observations from the case studies are summarized below:

- The lack of basic necessities—such as uniforms, food, and school supplies—is a barrier to girls' enrolment and retention. Funding is a constant issue, and, when scholarships run out, there is no guarantee that students or their families can continue to pay fees and contribute to a long-term increase in enrolment, attendance, and completion.
- PTA capacity building and school improvement grants strengthened the PTAs and subsequently encouraged the community to support girls' education, although with mixed long-term sustainability, as each community internalized the role of the PTA differently.
- Public perceptions of girls' education are shifting, although the changes seem tenuous and it is difficult to translate the attitudes into action. While teachers and parents cited the importance of girls' education and its contributions to their families and the town, children continued to be pulled away from school by parents for household activities.

- Academic support at home is limited; most students do not have textbooks and many appear to lack a home environment that encourages study. Many mothers in the case study communities had not attended school and were therefore unlikely to have the academic skills to help their daughters with their homework. After school tutoring has the potential to improve girls' academic performance, but it needs to be tailored to students' needs.

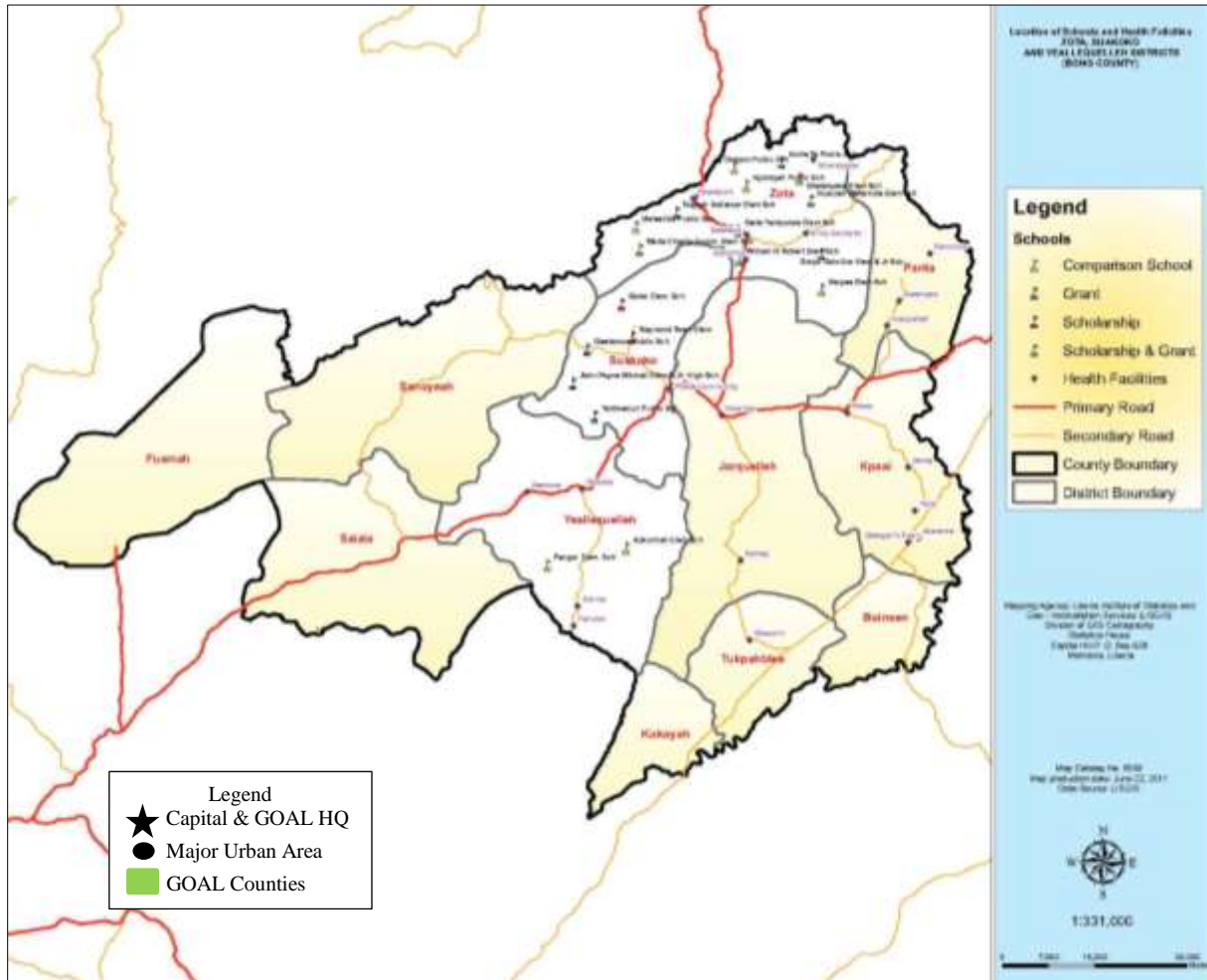
Overall, schools cannot address the transient nature of the student population as long as commercial and subsistence agriculture pressures continue, and PTAs will need to identify strategies to engage parents early to register their children and then keep them in school.

VII. Summary and Conclusions

The evaluation of GOAL has found that the project was mostly successful in meeting its targets, and that it had a positive impact on the enrolment and promotion of girls in participating schools, and on girls' completion of school, in Liberia. Among the different program models, providing direct scholarships to individual girls appeared to be more effective than providing grants to the girls' schools. Despite being more expensive, the scholarships were also more cost-effective than the grants.

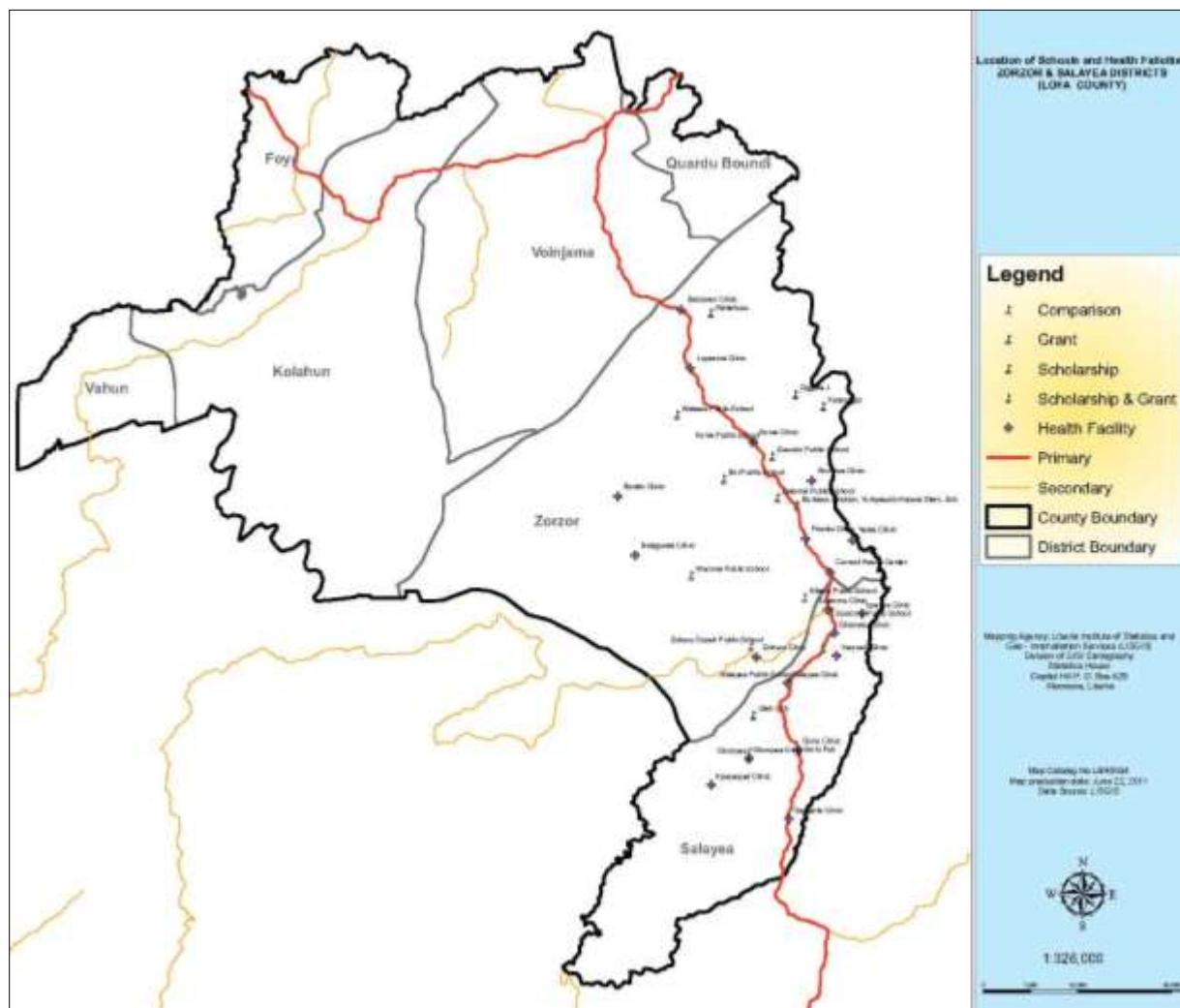
Annex A: GOAL School Locations by Intervention Type

Map A: GOAL Schools in Bong County



Source: LISGIS, 2012

Map B: GOAL Schools in Lofa County



Source: LISGIS, 2012

Map C: GOAL Schools in Grand Bassa County



Source: LISGIS, 2012