

Understanding Household and School Proprietor Needs in Low-Fee Private Schools in Ghana

A Needs and Impact Assessment of the IDP Rising Schools Program

Prepared by Results for Development Institute, in partnership with Consumer Insight Consult Africa, for the IDP Foundation, Inc.



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Executive Summary

Mirroring global trends,¹ Ghana has experienced rapid expansion in access to education over the past fifteen years. Between 2000 and 2011 the net primary enrollment rate more than doubled from 30 percent to 77 percent due to a variety of factors, including a considerable rollback of education fees (which began in 1997), a tripling of education spending, and rising incomes.

Despite these gains, the goal of providing every child with access to quality education remains a distant one. The quality of instruction in public education is generally poor, teacher absenteeism is high, and in certain areas, access to government schools remains low.

Within this context, the private sector has emerged as a viable provider of quality education in Ghana. The number of private primary schools increased by more than 46 percent between 2009 and 2015 and enrollment rates in private schools have also increased rapidly, from 18 percent to 25 percent of total primary enrollment.

This rapid growth has occurred despite minimal support from the government. Private schools, even those which limit fees (so called Low-Fee Private Schools or LFPS) do not receive government funds, and while official policies mandate that the government provide textbooks and teacher training and subsidize exam fees, these types of government assistance do not, in practice, reach schools (Abdul-Hamid et al 2016).

To support efforts of private schools to improve access to education, the IDP Foundation, along with its partner organization Sinapi Aba Trust, created the IDP Rising Schools Program (IDPRSP) in 2009. The IDPRSP seeks to strengthen LFPS by providing their proprietors with microloans in addition to training in basic accounting, financial literacy, and school and human resource management.

After nearly seven years of support, the IDP Foundation commissioned this report to measure the impact of IDPRSP and to better understand the needs of LFPS more broadly in Ghana. In addressing these dual objectives, this analysis aims to complement existing studies by analyzing:

- Priorities, motivations, and strategies of LFPS proprietors. Interviews with proprietors of 150 low-fee private schools provided information on how school-level decisions are made with regard to saving, investing, and attracting students. When coupled with surveys from 1,950 households, they permit an investigation into the alignment of perceptions of quality between proprietors and parents.
- School profitability and sustainability. Using school-level financial data, this study analyzes school profitability and sustainability, thereby augmenting the literature on longevity and the finances of LFPS.
- Affordability. Traditional indicators like household education expenditures are paired with data on determinants of school choice to provide a more complete picture of school demand, willingness to pay for education, and level of financial burden.

¹ Global primary school net enrollment ratio was 84% in 1999 and is estimated to have been 93% in 2015 (UNESCO, Global Monitoring Report, 2015).

In sum, this study is intended to contribute empirical data to what has often been an ideologically-charged debate about what role LFPS can play in complementing government provision of education. In doing so, it aims to identify ways in which a variety of education stakeholders can support LFPS to improve access to quality education in Ghana.

While the full report explores a diverse set of themes, a selection of salient findings is highlighted below. Four major findings are followed by a set of priority recommendations for the IDP Foundation and other key actors.

Major report findings

1. Despite a number of challenges, including poor infrastructure and a lack of financing, LFPS schools demonstrate impressive resilience.

Consulted stakeholders, including parents, consistently note the sub-standard physical condition of schools as a critical impediment to providing safe, quality education. Our study suggests that this is especially the case for those located in rural regions like the Upper East, where less than 50 percent of schools have toilets. When asked to rank their satisfaction with various school features, households are least satisfied with school facilities.

The primary cause of poor infrastructure is a lack of financing, with only one-third of LFPS reporting to be profitable and only 13 percent having adequate resources to pay for quality improvement projects. Schools do not generate enough revenue to be able to save for one-off improvements, and proprietors are reluctant to increase fees, fearing that doing so would deter access. Because their revenue base is not diversified (tuition and canteen fees account, on average, for 84 percent of total annual revenue), and they often lack access to loans, proprietors are faced with difficult choice: increase fees and potentially lose students, or forestall much-needed school improvement projects.

Despite these serious threats to sustainability, LFPS have demonstrated an ability to adapt and survive. Our data reveal that the average age of LFPS is 14 years. While this longevity is the product of a number of adaptations, two are particularly important. First, LFPS are able to keep expenses much lower than in government schools because of their ability to maintain low staff costs. Whereas staff salaries account for 17 percent of total expenses in LFPS, they account for nearly 83 percent of total expenditures in government schools (2013, UIS Statistical Database). Second, LFPS' flexible fee payment structures, which recognize the unsteady nature of parent incomes, diminish the number of missed payments, thus allowing LFPS to maintain a relatively predictable flow of income.

2. Teacher quality in LFPS is a priority for parents and proprietors alike.

Parents cite teaching quality as the most important contributor to a quality school. Furthermore, data from this study suggest that parents who send their children to LFPS are generally satisfied with the caliber of teaching. Teacher quality ranked highest in satisfaction among parents of children in LFPS, suggesting a prioritization of teacher quality on the part of LFPS proprietors. Nearly 91 percent of schools report having guidelines for teachers and 82 percent provide in-service training to teachers.

In addition to teacher quality, parents view the availability of teaching and learning materials (TLM) and the overall academic performance of the school as strong indicators of overall school quality. Notably,

although parents are least satisfied with school infrastructure, they do not perceive it a top determinant of school quality.

3. Schools must take care to avoid excluding the lowest-income households.

This study shows, in clear terms, that LFPS are unaffordable to the lowest-income households, as only 2 percent of LFPS enrollment is drawn from the poorest 25 percent of Ghana's population.

Education costs are also burdensome for many who attend LFPS. Using the commonly accepted definition of education affordability -- where education is affordable if a household spends less than 10 percent of its income on education expenses (Lewin 2007 and Tooley 2013) -- 27 percent of those families incurring education expenses fail to meet the affordability threshold. This figure jumps to 36 percent in the rural, lower-income Upper East Region.

Households in the bottom income quintile of the study's sample spend on average six times as much on education as a proportion of income as do households in the top income quintile. However, the actual amount spent by the top income quintile in GHC is only 22 percent greater than the amount spent by the bottom income quintile – hinting at a high income inelasticity for education spending within the sampled population.

The impact of this is notable. While permanent drop-outs are rare, survey data reveal that children temporarily stop attending school when parents are unable to pay fees. One in four households that send at least one of their children to a sampled LFPS notes that a shortage of money caused a child to miss school. These data suggest that any plan to garner additional revenue should carefully consider the financial burden school fees impose on lower-income households. In many cases, proprietors understand these risks and are hesitant to raise fees given fears of losing students from lower-income households.

4. IDPRSP program interventions have enabled LFPS proprietors to acquire more business acumen.

IDPRSP schools have responded favorably to the program's interventions, as they have boosted enrollment rates, increased the number of classrooms, and strengthened the quality of their infrastructure since joining the program. These results suggest that the program's main components are relevant and effective in achieving their intended objectives.

Of particular relevance to IDPRSP school proprietors is the training on financial accounting and bookkeeping, cited by nearly half as the single most valuable component. This is also reflected in practice: reported total revenue in IDPRSP schools is almost 73 percent higher than in non-IDPRSP schools.

In addition, training participants have retained the lessons imparted at the IDP Foundation sponsored Sesame Workshop, a separate workshop to the IDPRSP proprietor training and one that trains educators with practical strategies proven to help students learn. The majority of schools from a small sample of 37 schools that report having participated in the Sesame Workshop still use the acquired techniques.

Recommendations

Our study reinforces the importance of LFPS, highlighting that private schools are viewed by families as providing high-quality education and as positioning their children for future success. Nevertheless, more

can be done: the recommendations that follow offer guidance on how donors, foundations, and stakeholders of the low-fee private school sector can support the provision of high quality education by LFPS.

1. Conduct routine data analysis and expand data collection.

The availability of quality data on LFPS is low. As a result, those that support LFPS should strive to routinely collect, analyze, and publish program data on access, quality, affordability, and finance. The collection of longitudinal data would be particularly beneficial as it would allow for an analysis of trends over time, bring attention to the topic of LFPS, and serve as a global public good.

2. Expand access to micro-loans for infrastructure development projects.

Households express relative dissatisfaction with the current state of infrastructure in schools. This need is also recognized by proprietors, who lack access to financing for these improvements. Micro loans provide access to new financing, and 32 of the 110 interviewed proprietors attribute improvements in general school infrastructure to the presence of micro loans. Given their effectiveness and the need expressed by proprietors, the IDP Foundation and other donors should expand LFPS access to micro loans for infrastructure development projects.

3. Invest in efforts to increase teaching quality in order to attract and retain students.

IDPRSP has focused primarily on improving access to education by helping proprietors improve infrastructure and financial and operational management of schools. While parents are generally satisfied with the caliber of teaching, concerted efforts to improve teacher quality should serve as a natural next step for IDPRSP and other LFPS stakeholders.

Although they are able to take advantage of the inherent incentives that drive improved teacher performance in the private sector, LFPS should continue to strive for better teaching quality. Growth of the low-fee private school sector will inevitably lead to competition and schools that are able to distinguish themselves through the provision of high-quality education (measured by more than solely test scores) will continue to thrive. As this report's findings emphasize, parents consider high teacher quality as a key determinant of their willingness to pay for education and school choice. While most proprietors are investing in in-service training, interviews with education experts in Ghana suggest that more can be done to boost the frequency and quality of existing teacher training.

4. Support the development of policies to better integrate government and private education services, primarily through a heightened role in advocacy and sharing of good practices.

Given its network of partners in both the government and private education sectors, IDPRSP is in a unique position to support the development of policies that improve the education sector as a whole. Using the successes of the program as a foundation, IDPRSP could play a knowledge broker role by highlighting successful models, operational modalities, or pricing innovations found in IDPRSP schools and share them with private and public sector stakeholders.

Sharing of good practices and successes could fill a general lack of knowledge in this sector and could inform the development, for example, of clear standards on teacher-pupil ratios, infrastructure, sanitation, and school grounds. For private schools that are compliant with basic standards and that

complement government education services in underserved remote or high-density areas, subsidies in the form of teacher secondments, provision of free textbooks and teaching materials, free attendance to government teacher training, and supportive supervision by the education officers could also be included in negotiated public-private partnerships.

Finally, it is unlikely that the poorest households will ever be able to afford high-quality private schools without financial assistance. As a result, key stakeholders should support research and accompanying dissemination on innovative pricing models to ensure sustainability and affordability. As an example, sectoral partners could advocate for the introduction of public-private partnerships such as voucher programs or contract schools in order to lower education costs without making private schools financially unsustainable.

Conclusion

In view of its expanding reach, the private school sector in Ghana cannot be ignored. Encouragingly, there is a growing body of evidence on its effectiveness and the sustainability of its schools. This study, which represents one of the most in-depth of its kind, adds to this evidence base by collecting and analyzing data on attitudes and perceptions from both sides of the market.

Importantly, this study disputes the notion that proprietors are ruthless business owners, for whom profit margins trump academic achievement. To the contrary, its findings suggest that most proprietors are either breaking even or suffering a small loss, and for those that are making profits, they are often quite modest. Unfortunately, this puts much needed-improvements to infrastructure and teaching quality in jeopardy, which in turn limits the ability of LFPS to reach their full potential.

In order for these institutions to achieve their aim of increasing access to quality education in a sustainable manner, contributions from many actors are needed. Parents and caregivers must continue to demand quality from proprietors. Proprietors must invest in evidence-based practices which improve learning, not just test scores. And perhaps most importantly, government and private education actors must enhance the extent of their collaboration, bound by a shared goal of enhancing learning. Exchanges between representatives from both sets of institutions, whether about pedagogical practices, or policies that promote inclusion, can be mutually reinforcing.

This study has contributed to an emerging consensus of how to support LFPS in a manner that does not detract from, but instead complements the efforts of government schools. If calls for better coordination and more supportive policies are heeded, the impact on the education sector will be long-lasting.

Introduction

Over the past decade, the number of low-fee private schools (LFPS) in low- and lower-middle-income countries has steadily increased. In India, the number of LFPS has more than doubled since 1993, and in Kenya, it has tripled since 1997. In Ghana, the International Finance Corporation (2010) estimates the number of LFPS to be around 6,000 and rising.

This rapid growth of LFPS can partially be explained by failures in the current education system. Like other global markets, the growth of LFPS in Ghana is driven by high demand for and low supply of quality education opportunities. Private schools are seen by parents as more likely to be held accountable for both the quality of instruction and educational outcomes.

Remarkably, the growth of LFPS has continued despite numerous challenges. LFPS often operate in low-income areas and complex regulatory environments. Proprietors have difficulty accessing finance to fund school development projects and have little training in financial and school management. Creating the right conditions for these schools to flourish and improve education quality requires a concerted effort by governments, development partners, non-profit organizations, foundations, and researchers.

LFPS have also been met with global skepticism. While LFPS hold the potential to help the poor bridge the basic education gap, critics question whether they are affordable and of high quality. The financial burden that households face providing a quality education is often underestimated, and issues of equity have been frequently raised.

To help support the needs of this sector, the IDP Foundation along with its partner organization Sinapi Aba Trust created the IDP Rising Schools Program (IDPRSP) in 2009. The IDPRSP seeks to strengthen the LFPS sector by providing small loans, combined with training in basic accounting and financial literacy skills, along with school and human resource management to LFPS proprietors.

Purpose of this Report

To ensure IDPRSP continues to provide relevant services after nearly seven years of support, Results for Development Institute (R4D) was commissioned by IDP Foundation to conduct a needs assessment of LFPS in Ghana and to measure the impact of IDPRSP services on participating schools.

This research has two main objectives. The first is to assess the needs of LFPS and better understand heads of households' perceptions of quality and willingness to pay for quality education services. Despite the importance of the private sector in providing basic education in Ghana, there is little understanding of what kinds of assistance LFPS need to improve education services.

The second objective is to measure the impact of IDPRSP by 1) collecting follow-up data on IDPRSP schools to identify what has changed since joining the program, and 2) comparing the needs of schools that have participated in IDPRSP with those that have not (hereafter referred to as non-IDPRSP schools). Understanding what has worked and what has not can help determine what program interventions are most effective and whether adjustments are needed in the future.

Together, the needs and impact assessments can not only serve as important inputs in the development of IDPRSP's future strategy but also contribute to the scarce literature on LFPS in Ghana and provide insight on how LFPS can enhance access to quality education.

Roadmap to this Report

This report begins with a literature review of LFPS, including a summary of the major themes and topics of debate. It then describes the education context in Ghana, with a focus on issues related to quality and the growth of the LFPS sector. A description of the evaluation methodology is then presented, followed by findings and related recommendations.

The Literature on Low-Fee Private Schools

A review of the global and Ghana-specific literature on LFPS reveals several prominent themes. A vast amount of the existing literature addresses the issue of **barriers to access**. These complex, multifaceted social and structural barriers stem from financial constraints of households (**affordability**), gender disparities and geographical maldistribution of education (**equity**), and poor government regulatory framework (**state partnership**). The literature also focuses on the comparison of LFPS to their government counterparts (**quality**), elucidates the nuances that drive users to choose low-fee private education (**choice**), and describes how LFPS try to keep themselves relevant, sustainable, and attractive to parents (**cost effectiveness, public-private partnerships, market dynamics, accountability**). Finally, the literature describes the lack of a clear and universally accepted **definition of LFPS**, which could lead to an over-generalization of findings on LFPS.

One of the most important themes in the literature is that of **quality**. The majority of global literature supports the notion that the private sector delivers higher-quality education. When compared to government schools, LFPS achieve better educational outcomes internationally (Javaid et al, 2012; Singh and Sarkar, 2012; Mitra et al, 2011). For Ghana, however, the literature is more nuanced. Heads of household perceive LFPS to offer higher-quality education, although those perceptions are commonly based on the performance outcomes of advantaged private schools (Akaguri, 2011). Moreover, there appears to be no systematic difference in performance between LFPS and government schools when pupil characteristics and prior test scores are controlled for (Akaguri, 2011). Importantly, there remain questions as to whether these outcomes are better in absolute terms, and if the quality of education satisfies international standards.

With regards to the quality of teachers, evidence from global literature shows that LFPS teachers, although less formally qualified, demonstrate a higher commitment to teaching and are more likely to follow teaching approaches that lead to improved outcomes than are government school teachers.

Another prevalent theme in the literature is that of **equity** - who has the chance to attend low-fee schools and who is left out. Issues of geographical location and gender equity dominate this area of the debate, but other issues such as affordability are inextricably linked to the theme of equity as well. International literature positively describes how LFPS are becoming increasingly prevalent in rural areas, although a commonly expressed caveat is that rural placement does not automatically imply access for the poor as areas experiencing the growth in LFPS have relatively high income levels (Pal, 2010). However, Tooley and Longfield assert LFPS are narrowing the educational gap between different socioeconomic groups and are thereby seemingly better able to serve the poor. Härmä (2009) finds this argument to hold true, except for members of ethnic minorities, lower castes, and those of the lowest socioeconomic quintile - a conclusion supported by our findings.

In Ghana, the research on equity is more fragmented. Contrary to our findings, the literature shows that households, even the ones identified as "extremely poor," still made use of private schools. Although fees may be a determining factor, Akyeampong and Rolleston show that gender, age, and education level of parents exert a stronger influence on determining who goes to LFPS (2013). Furthermore, Ghanaian parents also indicate they favor sending "more able children" (often perceived to be boys) to LFPS, leading to the likely exclusion of girls and the disabled (Rolleston and Adefeso-Olateju, 2014).

As for gender equity, analysis shows that LFPS have not eliminated the gender gap but have "improved education for girls in developing countries" (Tooley and Longfield). Further research in this area is needed to better inform and disentangle the effects of various socio-economic variables, which could lead to social exclusion such as class, caste, and ethnicity.

Affordability of LFPS plays an equally crucial role in access. Costs of low-fee private education to households do not only include tuition; they often include books, transportation fees, uniforms, testing fees, and more. Additionally, the issue of affordability is linked to problems faced by the poorest households, such as seasonal or informal work, which result in unsteady flows of income. Day Ashley et al summarize that LFPS are relatively accessible to the poor, yet not accessible to the lowest quintiles due to financial constraints. Moreover, families of lower quintiles who choose to send their children to LFPS do so by making welfare sacrifices. Tooley and Longfield recognize this point but argue that at lower socio-economic quintiles, government school costs are only marginally lower than those of LFPS, and poorer households are either unable to afford sending their children to government schools or see LFPS as a better investment.

In Ghana, one study found that LFPS fees per child amounted to 30 percent of households' income in the poorest quintile compared to 16 percent if a child attends a government school. In comparison, the proportions of these costs for families in the richest quintile are 3 percent and 1.7 percent (Akaguri and Akyeampong, 2010). This suggests that households in low-income quintiles have strong demand for private education and are willing to pay for it despite financial constraints. In turn, private education providers are able to capitalize on that demand through creative fee structures that alleviate financial constraints on households (Akaguri and Akyeampong, 2010). However, this highly contested area lacks quality longitudinal studies on the long-term cost and types of sacrifices families of lower quintiles make when using LFPS.

On the theme of **cost**, the literature generally agrees that the cost of education delivery in the low-fee private sector is indeed lower than that in government schools. This is attributable primarily to the lower salaries of teachers working for LFPS, which could be interpreted either as exploitation of otherwise unemployed teachers or as "providing employment where it would not otherwise exist" (Day Ashley). As for financial sustainability, no direct indicator other than longevity of schools has been proposed in existing literature. Research cited by Day Ashley et al and Tooley and Longfield mention the relative longevity of LFPS institutions, especially when considering how recently the low-fee private sector has emerged. Beyond discussions of longevity, however, research on sustainability and profitability of LFPS is limited. This report contributes to filling this gap through its analysis of cost and affordability.

Another common theme is around the determinants of school **choice**. From their research in the Mfanesman district in Ghana, where 60 percent of inhabitants live below the poverty line, Rolleston and Adefeso-Olateju (2014) describe a 'rational' decision-making process for households sending children to LFPS. They found that the prevailing determinant of choosing private schools is that of perceived quality of education. Private education is perceived to provide a better opportunity for progression to higher levels of education. Apart from strong academic performance, other reasons for choice include the language of instruction and distance. This report provides further evidence on the determinants for choosing LFPS, a specific area that has not been as widely studied.

Regarding the theme of **accountability**, there is "limited, though consistent" evidence supporting the assumption that LFPS are more accountable to parents because they actively participate in the decision-making process of the school (Day Ashley 2014). Tooley & Longfield argue that in the market sense, LFPS are accountable because "parents pay fees and have the right to 'exit'" if they are not satisfied with school performance. However, more evidence is needed on the efficacy of mechanisms for school accountability, the power dynamics affecting decision-making processes, and the likelihood that parents will relay their grievances and dissatisfaction to school proprietors.

In terms of **state partnership**, the DFID review (Day Ashley 2014) reveals the widespread lack of capacity and market information which limits governments from positively intervening in the LFPS sector. This is reflected by failed attempts to set up regulatory frameworks or to enter partnerships with LFPS. Perhaps one of the most important roles of solid regulatory frameworks is the recognition of schools once they meet baseline national standards. However, a wide range of studies (for example Heyneman et al, 2013; Barrera-Osorio and Raju, 2010) indicate that LFPS may gain recognition through corruption and bribery. Barera-Osorio and Raju (2010) present strong evidence that states lack the know-how, capacity and procedural legitimacy to implement and enforce effective policy frameworks for LFPS collaboration and regulation.

Public-Private Partnerships (PPP) have also been studied extensively as a way to increase access to LFPS. Patrinos et al (2009) compare the relative strengths of four PPPs (vouchers, subsidies, private management and operations, and private finance initiatives²) and provide a useful framework for analyzing the various types of PPPs (See Figure 1). Vouchers and subsidies were found to be more effective at increasing enrollment than private finance. In addition, vouchers were found to have the strongest effect on improving outcomes overall (increased enrollment, improved educational outcomes, reducing education inequalities, reduced costs). In interviews with the CEO of Omega Schools (Ghana's largest chain of LFPS), Goldstein (2015) reports that the organization is actively exploring a vouchers solution to boost access to low-fee private education.

Figure 1. Categorization of education provision and finance

		Provision			
		Private	Public		
	Private	Private schools	User fees		
		Private universities	Student loans		
a)		Home schooling			
nc		Tutoring			
Finance	Public	Vouchers	Government schools		
		Contract schools	Government		
		Charter schools	universities		
		Contracting out			

(Adapted from Patrinos et al, 2009)

Furthermore, there is evidence that shows LFPS are often "filling the gaps where the supply of government schools is low, and also where government schools are performing poorly," raising the questions as to whether LFPS are complementary to or competing with the public sector in the

² Private finance initiatives are infrastructure related partnerships. Private finance initiatives allow partnerships consisting of private consortiums and public authorities to construct and maintain education facilities.

education **market** (Andrabi et al. 2013). Day Ashley (2014) state that "evidence on whether the effect of competition is to drive up the quality of government schools or to deplete it by encouraging better-off students to exit the state sector is sparse and contested." In terms of market dynamics in Ghana, Goldstein (2015) reports that Omega schools are targeting a ten-fold increase in the number of Omega schools within the next 5 years (from 20 currently to 200), with the addition of 35 new schools every year after that. Whether Omega has been able to expand as planned is yet to be seen.

Finally, existing literature reflects a lack of a universally-accepted **definition of LFPS**. LFPS can be defined either in terms of the cost incurred by the user relative to their household income or the cost of providing education services by the school. USAID, for example, defines LFPS as schools with tuition rates of less than 50 percent of the country's minimum wage, while Barakat (2012) suggests that LFPS are those in which schooling fees (tuition and auxiliary fees) do not exceed 4 percent of household income.

Tooley defines school fees as being affordable if the total costs of educating all children in a family are at or below 10 percent of total family income (2013). Moreover, Tooley categorizes the affordability of schools in the following manner:

- Lowest fee private schools are those affordable to families on or below the US\$1.25 poverty line
- **Low fee** private schools are those affordable to families earning between the UD\$1.25 and US\$2 poverty lines
- Medium fee private schools are those affordable to families earning between the US\$2 poverty line and US\$4 middle class income line
- **High fee** private schools are those affordable to families earning above the US\$4 middles class income line

What is considered "private" has also proven difficult to define. In the broadest sense, private education refers to any type of formal school that is outside the government education system. Private schools, however, can be partially funded and regulated by the government, which often blurs definitional lines (UNESCO 2015). Among most, schools are considered private if the provision and finance of education both are private, as shown in the highlighted quadrant in Figure 1 (Patrinos et al 2010).

Definition of Low-Fee Private Schools

This report adapts Tooley's definition of LFPS for the Ghanaian context. While the "10 percent of total family income" definition is used to determine whether a school is affordable, global poverty rates are not used to define LFPS. Instead, census data on income levels in Ghana are used to determine the thresholds for what is considered low-fee.

In this study, an LFPS is one in which the total fee collected for educating all children in a household is at most 10 percent of total household income *for the two lowest income quintile groups in Ghana*. By taking into account Ghana-specific income data, this definition represents a context-specific version of how Tooley describes low-fee schools.

The tables below illustrate the affordability of school fees across Ghana's regions (figures in GHC).

Figure 2. Affordable annual school fees based on region

Region	Quintile 1 (lowest income)	Quintile 2	Quintile 1 and 2 (Mean)
Ghana	269	535	402
Western	366	726	546
Central	205	406	305
Greater Accra	316	627	471
Volta	233	462	347
Easter	223	442	332
Ashanti	404	803	604
Brong Ahafo	213	424	318
Northern	147	292	220
Upper East	104	207	155
Upper West	141	280	210

Source: Calculated using data from GLSS 6, Ghana Statistical Service

Based on these data, schools meet the LFPS threshold if fees fall below 402 GHC. Using this definition, it is estimated that 65 percent of IDPRSP schools are LFPS (a full description this methodology can be found in the annex).

Implications of this Research

This report helps shed light on several important topics that have been largely bypassed by other studies.

First, this research addresses the priorities, motivations, and strategies of LFPS proprietors. Interviews with proprietors of 150 low-fee private schools are used to understand how school-level decisions are made in regards to saving, investing, and attracting students. School- and household-level surveys permit an investigation into the alignment of perceptions of quality between proprietors and parents.

Second, a collection of school-level financial data allows for the study of school profitability and sustainability beyond merely examining school longevity. These data also help fill gaps in the literature that compare the relative efficacy, efficiency, and equity of different models, behaviors, and strategies employed by LFPS.

Finally, this report contributes to the literature surrounding much-contested issues such as affordability by examining traditional indicators like household education expenditures, along with detailed data regarding the rationale for school choice.

LFPS have been subject to significant degrees of criticism and it is hoped that the conclusions from this study can inform researchers and practitioners alike on which critiques are justified, identify ways in which LFPS can adapt in order to better serve all members of their communities, and ultimately improve the provision of education in Ghana.

Education in Ghana

In the last fifteen years, Ghana has experienced an impressive expansion in access to education. Driven by population growth, economic growth, and changes in government policy, primary enrollment nearly doubled between 2000 and 2011. Beginning with the Free Compulsory Basic Education Programme (FCUBE) in 1996, Ghana's government began a gradual rollback of education fees, first eliminating tuition and then providing additional government funding to reduce the financial burdens of supplementary educational expenses, such as supplies, textbooks, and school meals, on poor families. Initiatives to reduce financial burden include programs such as a capitation grant introduced in 2005, the Ghana School Feeding Program, and the Livelihood Empowerment Against Poverty conditional cash transfer (Darvas and Balwanz 2013).

Figure 3. Enrollment Rates from 2009/10 to 2014/15

		2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
	NER (%)	58.7	60.1	64.2	74.8	90.8	82.7
KG	Out of school population	610,783	604,785	556,252	354,560	123,683	237,479
	% Private enrollment	19.5	20.8	22.2	23.6	24.6	27.2
	NER (%)	83.6	77.8	81.7	84.1	89.3	91.0
Primary	Out of school population	659,187	910,970	771,644	623,385	411,448	354,861
	% Private enrollment	18.6	19.3	22.1	23.1	23.2	25.3
Junior	NER (%)	47.5	46.1	46.1	47.8	49.2	49.0
High	Out of school population	859,835	905,243	926,016	921,581	913,015	950,490
School (JHS)	% Private enrollment	17.4	17.6	19.0	20.3	20.1	22.0

Source: Adapted from Ministry of Education 2015

Currently, Ghana's free and compulsory education consists of two years of kindergarten (KG), six years of primary school, and three years of junior high school (JHS). Basic education terminates with the Basic Education Certificate Examination, which determines advancement to senior high school (IBE 2010).

Although impressive gains have been made in increasing access to primary education, the Government of Ghana has recently been shifting its focus away from primary education. In 2011 the primary education budget made up 35 percent of the total education expenditure, which by 2014 had fallen to 22 percent. This drop is explained by an increase in the proportion of the budget spent on pre-school (3 percent to 8 percent), JHS (12 percent to 16 percent), and SHS (15 percent to 22 percent) over the same period. Primary-level spending did not fall in absolute terms between 2011 and 2014, but only increased marginally from 1.2 to 1.4 billion GHC, while the total education budget increased from 3.5 to 6.5 billion GHC by 2014 (Ministry of Education 2015).

Despite a tripling of education spending over the last decade and the introduction of programs designed to lower education costs, significant obstacles persist in ensuring that every child has access to quality education. Although schools receive on average 13 GHC (3.30 US\$) per pupil per year to cover tuition fees, schools still face challenges in the timely release of capitation grants and its effective use (Osei et al 2009). Families are still responsible for many supplementary education costs that are not included in various social programs, including uniforms, school supplies, transportation, and PTA dues. Even though tuition fees have been eliminated, these additional costs prevent a large number of poor families from

accessing government education. In 2010 the average per-child cost of these supplemental fees in government primary schools was equivalent to 16 percent of the average annual income of the poorest quintile of households (Akaguri and Akyeampong 2010). Many poor families, therefore, find it unaffordable to send any or all of their children to a government school, even with government subsidies.

The persistent, appreciable costs of government education result in significant inequalities in access to and quality of education between the poor and wealthy, as well as between rural and urban populations. The primary net enrollment rate of the richest quintile is 85 percent, compared to just 61 percent for the poorest group. This disparity only worsens at higher levels of education, as the enrollment rate for the richest quintile at the senior secondary level is three times the enrollment rate of the poorest quintile (Darvas and Balwanz 2013). In 2011, the net attendance rate (NAR) for rural primary school, at 68 percent, was 12 percentage points lower than the urban rate of 80 percent. The disparity in attendance was even greater at the secondary level, which was 51 percent in urban areas but only 34 percent for rural areas (Darvas and Balwanz 2013).

Furthermore, many of the students who do attend school receive a low quality of education. In 2011, only 35 percent of students in the last year of primary school were proficient in English, and only 16 percent reached proficiency in math. Significantly, these results are differentiated by location, as 46 percent of urban students were proficient in English, compared to only 17 percent of rural students (Darvas and Balwanz 2013). Such low scores reveal an education system that fails to impart basic competencies to a large proportion of students. Low student outcomes can in part be attributed to high teacher absenteeism in government schools, which is consistently between 20 and 30 percent throughout the country (Darvas and Balwanz 2013).

This could explain why enrollment in the private sector is growing much more rapidly than in government schools. The number of private primary schools increased by more than 46 percent between 2009 and 2015, compared to 4 percent growth in the government sector, and it is estimated that 40 percent of those private schools are considered low-fee (CDC Consult Limited 2009). Enrollment rates in private schools have also increased rapidly, from 19 percent to 25 percent of total primary enrollment and 17 percent to 22 percent of JHS enrollment between 2009 and 2015 (Ministry of Education 2015).

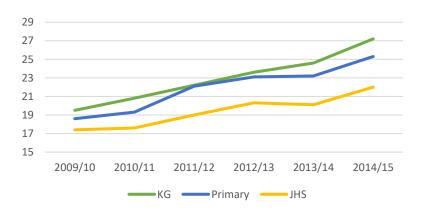


Figure 4. Percent of total enrollment in private schools

Source: Adapted from Ministry of Education 2015

Figure 5. Number of government and private schools, official.

		2009/10	2014/15	Total growth	Percent change
Kindergarten	Government	12,481	13,828	1,347	10.8%
	Private	4,990	7,132	2,142	43.0%
Primary	Government	13,835	14,405	570	4.1%
	Private	4,722	6,904	2,182	46.2%
JHS	Government	7,969	9,445	1,476	18.5%
	Private	2,799	4,395	1,596	57.0%

Source: Adapted from Ministry of Education 2015

This rapid growth is occurring without substantive support from the government. Private schools do not receive any per-student financial support. While official policies mandate for the government provision of textbooks and teacher training and the subsidization of exam fees, this government assistance does not reach schools in practice (Abdul-Hamid et al 2016). While the regulatory environment allows for a great deal of operational autonomy, it does not require much in the way of accountability, nor does it provide effective sanction towards underperforming schools. Most regulations surround the use of curriculum, fostering a safe environment, and ensuring that at least a third of the teachers are certified. However, schools are often required to meet additional standards which are not specified in official policies, such as having playgrounds and libraries or owning the land on which the school is situated. Furthermore, official regulations are not uniformly enforced across the board and schools are still subject to income, property, and business taxes, which place unnecessary burdens on schools that already struggle to break even (Abdul-Hamid et al 2016). In short, government policies are more likely to impede than promote LFPS sustainability, given that regulations are inconsistently applied and compliance is not necessarily rewarded with government subsidies or tax breaks.

Methodology

To address the main research objectives to 1) assess the needs of LFPS proprietors, and 2) understand the impact of the IDP Rising Schools Program, this study employed a mix-methods approach that included desk research and primary data collection that were both quantitative and qualitative in nature. Primary research, which included school surveys, household surveys, and key informant interviews, were conducted in five regions: Ashanti, Brong Ahafo, Greater Accra, Upper East, and Western.

School surveys were conducted across IDPRSP and non-IDPRSP schools in order to understand the needs of both subsets of schools. To estimate the impact of IDPRSP, a pre-post comparison was conducted. Given the absence of a valid counterfactual and non-random selection for IDPRSP participation this study is only able to report on observed changes in key school indicators and does not claim causal impact of the IDPRSP.

Research Questions

The research objectives were distilled into seven key questions:

Needs Assessment

- 1. What are the stated needs of proprietors to improve quality?
- 2. What quality improvement mechanism would they be willing to pay for?
- 3. What are schools' current financial capacities to pay for these mechanisms?
- 4. What are parents'/guardians' perceptions of a quality education?
- 5. What kind of educational services are parents/guardians able and willing to pay for?
- 6. How can IDP collaborate with other actors to address the identified needs?

Impact Assessment

7. What impact does IDPRSP have on schools?

School Selection

A total of 150 LFPS were selected across five regions for this study.³ The sample of LFPS consisted of 110 IDPRSP schools and 40 non-IDPRSP schools. The 110 IDPRSP schools were split into two groups: 55 schools with pre-intervention data collected before the schools joined the program and 55 separate schools with data collected in 2012. Parameters for the selection of IDPRSP schools included location and region. Details of the sample and population are provided in the annex.

The 40 non-IDPRSP schools were selected based on region and tuition level in order to create a sample comparable to the sample of IDPRSP schools. Non-IDPRSP schools were selected from a list of government-registered private schools for all regions except Brong Ahafo. In order to ensure a comparable sample, calls were made to selected schools to ensure tuition fees were within similar thresholds of IDPRSP schools.⁴ In Brong Ahafo, non-IDPRSP schools were identified through community engagement and discussions with school proprietors. Details of the tuition threshold are provided in the

³ The 5 regions of Greater Accra, Ashanti, Brong Ahafo, Western, and Upper East were selected following discussions with IDPRSP staff.

⁴ Data collected in 2012 include tuition fees which were used to calculate tuition thresholds for non-IDPRSP schools.

annex.

It is important to note that the needs assessment includes all schools included in the sample - 110 IDPRSP schools and 40 non-IDPRSP schools. The pre-post analysis of the impact assessment only includes the 55 schools that have pre-intervention data.

Households Selection

A total of 1,950 households were randomly selected using the student enrollment records of each sampled school. Through help from the school administrator, parent's telephone numbers of the selected student were provided to the field team in order to schedule interviews. Thirteen households per school were selected, and households were substituted if the head of household refused to be interviewed. Details of the number of households per region are found in the annex.

Report Phases

There were four phases to our research: **Inception, Testing, Data collection**, and **Synthesis**. The inception phase included desk research, literature review, instrument development, and sample selection methodology - all of which were presented in an Inception Report. In the testing phase, school and household questionnaires were field-tested and refined, as was the method of randomly selecting households. Data collection spanned five weeks before which a formal training of surveyors was conducted. A refresher training for field team leaders was also conducted after two weeks of data collection. Synthesis of the data included quality and validation checks and analysis through STATA and Excel. Excel was used to clean the data, create cross-tabulations, and to code qualitative responses. STATA was used to clean and organize data and create cross-tabulations, as well as to conduct difference-of-means tests and to run various regression analyses.

Findings

Chapter 1: Needs Assessment

The needs assessment section is composed of three parts: current challenges, needs, and the affordability of LFPS to households. The chapter begins with a snapshot of profiles of the sampled schools by region.

Profiles of Sampled Schools

Brong Ahafo

Average enrollment: 278

Average primary tuition fee: 70 GHC per term Teacher Salary Range: 72-104 GHC per month Number of schools within 30 min walk: 1.34 Government and 0.71 Private

Ashanti

Average enrollment: 279

Average primary tuition fee: 56 GHC per term Teacher Salary Range: 110-140 GHC per month Number of schools within 30 min walk: 0.7

Government and 1.24 Private

Western

Average enrollment: 344

Average primary tuition fee: 53 GHC per term Teacher Salary Range: 124-163 GHC per month Number of schools within 30 min walk: 1.13

Government and 1.83 Private

Upper East

Average enrollment: 360

Average primary tuition fee: 96 GHC per term Teacher Salary Range: 131-181 GHC per month Number of schools within 30 min walk: 0.97

Government and 0.67 Private

Greater Accra

Average enrollment: 229

Average primary tuition fee: 74 GHC per term Teacher Salary Range: 205-279 GHC per month Number of schools within 30 min walk: 0.5

Government and 4.68 Private

Current Challenges

Most LFPS are in poor physical and financial condition. They suffer from inadequate infrastructure, are financially constrained, and struggle to be profitable. Despite these challenges, LFPS demonstrate an impressive resilience. This study shows that the average age of LFPS across both sub-sets of IDPRSP and non-IDPRSP schools is 13.7 years, which is a notable achievement considering the myriad of challenges listed below. One reason for their longevity is their ability to adapt. LFPS can keep traditionally large expenses such as teacher salaries low and offer flexible payment schemes to maximize revenue.

Finding 1: LFPS cite poor infrastructure and financial constraints as major challenges.

Nearly 44 percent of LFPS interviewed mention poor infrastructure as their biggest challenge. Poor infrastructure manifests itself in a range of ways, including a lack of toilets and sanitation facilities, dilapidated classrooms, sub-standard access roads leading to the school, flooding hazard, and land erosion. These infrastructure challenges are more pronounced in the Upper East and in rural and unregistered schools. For example, while 88 percent of schools report having toilets, the proportion is

below 50 percent for schools in the Upper East. The average number of toilets per school across all regions is 5.5, but on average only 3.8 are functioning. This means the ratio of students to functioning toilets is 94 to 1.

In addition, LFPS report financial constraints. Only 13 percent of LFPS report having sufficient resources available to finance quality improvement projects. Although proprietors have considered raising tuition fees to increase revenue, they express concern that parents would be unable or unwilling to pay higher school fees — an acknowledgement that their primary clients, households, are financially constrained themselves. As a result, proprietors find that total revenue is often too low for them to save and finance large infrastructure development projects.

Challenges related to accessing textbooks, reading books, and other TLM concern 23 percent of school owners, and represent the third-most-cited challenge. Other notable challenges include the inability to provide adequate transportation, the lack of appropriate classroom furniture including computers, poor IT equipment, and safety concerns due to a lack of compound walls. A full list of concerns is included in the annex.

Finding 2: Few LFPS are profitable and proprietors from one in four schools do not know whether they made a profit or loss.

The lack of revenue generation impacts profitability. Only 33 percent of schools reported being profitable in the last academic year, while 25 percent said they broke even and 17 percent reported suffering a loss. Notably, and perhaps of more concern, 24 percent report not knowing their financial standing. The tables below show the self-reported results by IDPRSP status, school region, and location.

Figure 6. Profit/Loss analysis by IDPRSP status, location, and region

Profit / Loss	School type	
	IDPRSP	Non-IDPRSP
-		
Profit	37%	23%
Loss	14%	28%
Break-even	25%	25%
Don't know	24%	25%

Profit / Loss	School Locat	School Location			
	Peri-urban	Rural	Urban	Total	
Profit	36%	23%	55%	33%	
Loss	17%	20%	10%	17%	
Break-even	23%	34%	5%	25%	
Don't know	23%	23%	30%	24%	

Profit / Loss	School Location						
	Ashanti	Brong Ahafo	Greater Accra	Upper East	Western	Total	
Profit	30%	26%	71%	50%	22%	33%	
Loss	23%	10%	14%	29%	13%	17%	
Break-even	19%	33%	0%	21%	43%	25%	
Don't know	28%	31%	14%	0%	22%	24%	

Analyses of the determinants of profitability that were estimated across various econometric models clearly indicate that urban schools are much more likely to be profitable than are rural schools. Periurban schools are no more profitable than are rural schools. There is also evidence that is suggestive, but not conclusive, that schools with JHS are less profitable, that schools whose proprietor has a tertiary education are less profitable than schools whose proprietor has a secondary education, and that head teacher salaries correlate positively with profitability.

There are two main implications of these results. First, proprietors should carefully consider whether expanding to JHS is feasible and profitable. Providing JHS requires specialized teachers who command higher salaries and need specific TLM. In Ghana, government JHS are already considered to be of higher quality than private schools, and it is common practice for students to switch to a government JHS or attempt to enroll in a prestigious government JHS after completing primary school. Indeed, the average age of children attending government schools from the sampled households is 12.5, compared to 8.8 for children attending private schools. Households seem to start their children in private schools, then switch to government at higher levels. Because government schools are generally of higher quality at the JHS level than primary, there may be limited demand for the private provision of JHS.

Second, although further analysis is needed, the peculiar inverse relationship between profitability and proprietor education could be in line with the perception among education stakeholders that proprietors with an education background are less likely to be "business-minded," and therefore, are less likely to be profit-driven.⁸

Finding 3: The revenue and expenditure streams of LFPS are not diversified.

Analyses of self-reported income and expenditure data reveal that LFPS rely heavily on student fees to generate revenue. As expected, nearly all schools report generating revenue from tuition and canteen fees, which together account for 84 percent of total annual revenue. Transportation fees are the next-highest revenue-grossing line item, at 5 percent of total annual revenue.

Apart from school bus rental, very few schools attempt to generate revenue from entrepreneurial sources such as the rental of school property and facilities to external parties, recommendations that are made by IDPRSP. Out of 150 schools, only 3 report earning revenue from donors such as churches and NGOs.

It's also important to note that high revenue-generating streams such as canteen fees and transportation programs are also high expense items. Cooking and food supplies represent, on average, 44 percent of total expenses for the sample of 150 schools. Teacher and proprietor salaries compose 17 percent of total expenses while loan repayments form 9 percent. Facility maintenance, electric, water, and taxes each represent 3 percent of total expenditures, on average.

⁵ Details of the econometric models as well as their results can be found in the annex.

⁶ Source: expert interviews.

⁷ Education experts cite that proprietors who were formerly educators may be less familiar with running a for profit business.

⁸ The proxy for having an education background in such an assumption is the proprietor's "level of education."

Figure 7. Top income and expenditure line items9

Revenue		Expense	
Canteen fees	44%	Cooking and food supplies	44%
Tuition	40%	Salaries	17%
Transportation	5%	Scholarships/Bursaries	13%
Extra classes	4%	Loans repayment	9%
Registration/Exam fees	2%	Transportation	7%
Loans	1%	Water/Electricity	2%
ICT	1%	Facility Maintenance	1%
Uniform	1%	Other	7%

Although the top two revenue and expense items are the same across all regions, there is regional variation in their proportions. In Upper East, for example, 82 percent of revenue is generated from tuition fees and in Greater Accra, nearly 46 percent of expenses are salaries.

Figure 8. Top two income and expenditure line items by region

Region	Revenue		Expense	
	Tuition	Canteen Fees	Cooking and food supplies	Salaries
Ashanti	38%	43%	44%	12%
Brong Ahafo	54%	28%	37%	28%
Greater Accra	23%	59%	12%	46%
Upper East	82%	15%	18%	36%
Western	29%	63%	61%	25%

Finding 4: Despite these challenges, LFPS demonstrate resilience.

Given the challenges of poor infrastructure, financial constraints, and a lack of diversity in revenue, LFPS have surprisingly high longevity. The average age of an LFPS in our sample across both IDPRSP and non-IDPRSP schools is 13.7 years. The data and literature point to several reasons why schools are able to survive for so long.

First, LFPS differ from government schools in that they can keep operating costs low by hiring teachers at lower wages than government schools. The figure below presents average teacher salaries across regions.

⁹ Analysis should be interpreted with caution as line item revenues are self-reported by proprietors and contain inconsistencies. Total revenue is calculated by summing the averages across all reported line items and adjusted according to line item weights. As a result, the above figures should be interpreted as rough estimates. Actual amounts are in the annex.

Figure 9. Minimum, maximum, and average salaries of teachers across regions 10

	Average of salary of primary school teachers (1 GHC = 0.25 US\$)	Average of highest salary paid to the Primary teachers? (In GHC)	Average of lowest salary paid to the Primary teachers? (In GHC)
Ashanti	129	143	116
Brong Ahafo	107	118	101
Greater Accra	242	279	205
Upper East	160	181	141
Western	144	163	125
Overall	140 (35 US\$)	157 (40 US\$)	126 (32 US\$)

These figures pale in comparison with the average government salary of teachers. According to the Ghana Education Service, Controller and Accountant-General Department, the average salary for a government primary school teacher is GHC 1,300 (330 US\$) per month, which is nearly ten times the average LFPS teacher salary. As a result, overall expenditure on staff salaries is considerably lower in LFPS than government schools. In Ghana, staff expenditure accounts for nearly 83 percent of the government's total expenditure in public institutions (UIS, UNESCO) compared with 17 percent in LFPS.

Box 1. The influence of competition on teacher salaries

It is possible that the Upper East has high education fees, and consequently higher profitability and teacher salaries, because there are fewer schools to compete with, and because so many of the other schools are government schools. The figure below presents the average number of schools within a 30-minute walk of the student's home. The Upper East has, on average, the lowest number (0.67) of non-government schools within a 30-minute walk of student's home, and report high rates of tuition fees, teacher salaries, and higher likelihood to report a profit.

Figure 10: Average number of schools within a 30-minute walk of student's home

	Government	Non-Government	Percent non-government
Ashanti	0.69	1.24	64%
Brong Ahafo	1.34	0.71	35%
Greater Accra	0.49	4.68	91%
Upper East	0.97	0.67	41%
Western	1.13	1.83	62%

Second, the ability to offer flexible payment schemes allows LFPS to capitalize on households' high willingness to pay for education despite having errant income flows and financial constraints.

Third, LFPS are more inclined to finance gradual, piece-meal infrastructure projects given their financial constraints. This "gradual approach" represents a sensible, ad-hoc strategy that utilizes additional revenue during profitable years to finance projects. When visiting an LFPS, it is common to notice

¹⁰ Proprietors were asked to list the salary of their highest and lowest earning teacher. The averages of all responses were calculated.

partially constructed classrooms, walls, compounds, and other clear indications that the infrastructure has been developed in distinct stages. One in five LFPS have either partial resources available or have started but stalled their infrastructure development projects. Like most rational and financially constrained entities, LFPS will inherently invest in segments, often during periods when business is strong and stall investment when it is weak.

These principles of keeping costs low, being flexible with payments to support enrollment, and adopting conservative investment plans could explain why LFPS, despite low financial liquidity and limited profitability, have relatively high longevity.¹¹

Box 2. Reasons for teacher resignation

Although the salaries presented in Figure 9 are significantly lower than what is found in government schools, low teacher salaries are not the primary reason for teacher resignation. Nearly two-thirds of schools reported an average of 2.4 teacher resignations since the beginning of the academic year. The main reason for teacher departures was to pursue further education, followed by teacher relocation as the second-most-common reason, and low salaries as third. Although these results are proprietor-reported, the findings are contrary to the literature that describes low salaries as a top reason for poor teacher retention in LFPS. The table below shows the top reasons behind teacher resignation among the 96 schools that provided a response.

Figure 11. Top reasons for teacher resignation

	Percent
Further education	67%
Teacher relocated	13%
Low salary	9%
Misunderstanding / conflict	6%
Not sure/do not know	5%
Location of school	4%
Delayed salary	3%
Pregnancy/childbirth	1%

¹¹ It is important to note that while the sampled schools all have substantial longevity we don't know anything about schools that have failed. This introduces significant selection bias, which makes it difficult to speak for LFPS in general.

Current Needs

The majority of LFPS cite infrastructure as their most pressing need to improve quality, followed by teacher quality and school transportation. Teacher quality in LFPS is a priority for parents and proprietors alike. Contrary to views expressed in expert interviews, proprietors are investing in teacher quality, through pre- and in-service training. However, interviews with education experts in Ghana reveal that more can be done to boost the frequency and quality of existing teacher training.

Finding 5: LFPS cite school infrastructure as their most pressing need to improve quality. Teacher quality and school transportation are a distant second and third.

Nearly 54 percent¹² of proprietors mentioned better school infrastructure as a priority measure that would improve the quality of their schools. For the majority of proprietors, improvements to school infrastructure include the construction of new classrooms or refurbishment of current classrooms from wood to more permanent structures such as "blocks." The need for improved school infrastructure is consistently cited across all regions and locations, but is most frequently cited in the Upper East (64 percent). In relation to other school characteristics, households also expressed the least satisfaction with current school infrastructure (see Figure 14 for full results).

Even though the majority of LFPS invest in teacher training (see Finding 6), proprietors specifically mention the need to have more in-service training and to hire more qualified teachers. Mentioned by 15 percent of schools, improving the qualification and skills of teachers is the second-most-cited need. For some schools, improved teaching was directly expressed as a means to attract new students, a signal that proprietors understand quality teaching leads to higher academic performance and stronger ability to attract students. The table below presents priority needs cited by proprietors.¹³

Figure 12. Priority Needs for Quality Improvement, Proprietors' free response

	Frequency	Percent
General infrastructure and completion of		
existing structures	59	39%
Teacher qualification/skills	22	15%
Increase number of buildings/classrooms	21	14%
More/better transportation	15	10%
Computers / IT education	12	8%
Acquire textbooks/learning materials	11	7%
Increase learning or academic performance of students	8	5%
Toilets, water and sanitation	5	3%

¹² Sum of general infrastructure and classroom building.

¹³ For full table of results see annex.

Finding 6: Households consider teacher quality a strong determinant of school quality. In response, proprietors commonly invest in teacher training.

Households were asked to describe the factors that they think characterize a high-quality school. The presence of qualified teachers and good teaching were viewed as strong determinants of school quality.

Figure 13. Determinants of school quality, head of households' free response.

	Percent
Qualified teachers	31%
Teaching and learning materials	23%
School academic performance	15%
Good teaching	14%
Good facilities	6%
Good infrastructure	6%
Student academic performance	4%
Reasonable tuition fees	4%
Discipline	4%
Learning environment	2%

At the same time, when asked to rank their satisfaction with various school features on a scale of 1 to 5, households report high levels of satisfaction with teachers and the academic performance of the school.

Figure 14. Parents' reported satisfaction ranked on a scale of 1-5¹⁴

	IDPRSP	Non-IDPRSP
Head Teacher	4.47	4.51
Teachers	4.30	4.38
Academic performance of the school	4.28	4.31
Performance of your child at this school	4.28	4.32
School management decisions	4.00	4.04
School Fundraising activities	3.79	3.8
School Facilities	3.58	3.59

This high level of satisfaction may be partly explained by the fact that proprietors dedicate resources to improving teaching and ensuring current teaching quality. Nearly 91 percent of schools report having guidelines for teachers, 82 percent provide in-service¹⁵ training, and 67 percent provide pre-service training. Contrary to common perception, nearly 72 percent of LFPS who provide teacher training

¹⁴ Head of households were asked to rank various school features on a scale of 1 to 5, with 1 being "very dissatisfied" and 5 being "very satisfied." A comparison of mean responses using two sample t-tests show no statistically significant difference between IDPRSP and non-IDPRSP schools, with the exception that parents in non-IDPRSP are slightly more satisfied with their teachers.

¹⁵ Training of teachers who are already in the classroom (UNESCO).

¹⁶ A smaller number of rural schools and schools located in the Western Region report the provision of in-service training.

manage to do so internally. 15 percent provide teacher training through a third-party provider, while others either pay for or receive free GES training services. The table below lists the different ways proprietors finance teacher training.

Figure 15: Ways LFPS pay for teacher training

	N	%
Train internally	89	72%
Pay for GES training	39	32%
Pay a company to train teachers	19	15%
Free GES training	18	15%
Free training by other organizations	9	7%

Moreover, there is evidence from global literature that, albeit often less formally qualified, teachers in LFPS demonstrate a higher commitment to teaching and apply techniques that are likely to achieve, at a minimum, strong student test results due to greater accountability. Unlike government schools, LFPS can hire and fire teachers based on performance. It appears LFPS have been able to maximize inherent market incentives and use an operating model where they can hire low-wage teachers and provide them with in-service training without, ultimately, jeopardizing household satisfaction with teacher and school academic performance.

Notably, education stakeholders from NGOs and public institutions in Ghana recommend that LFPS place even more emphasis on teacher training because they perceive that most LFPS do not have the financial means to hire professional and qualified teachers. Several asserted that LFPS focus too heavily on passing exams rather than providing a holistic education, noting that it is common for students who complete their primary schooling in LFPS to struggle in government JHS.

Box 3. Teacher training needs

To better understand specific LFPS teacher training needs, all proprietors, regardless of whether they cited improving teacher quality as a top need, were asked which teacher training topics would be the most useful. By far the most frequently mentioned type of support is related to teacher-focused didactics and the use of modern teaching materials. The figure below presents a list of teacher training priorities for proprietors.

Figure 16. Selected list of types of teacher training priorities, free response.

	Percent of 150 schools
Teacher-centered didactics: Modern, effective methods of teaching, improved use of TLM	38%
Learner-centered pedagogy: Counselling & psychological skills, how to relate with students	17%
Managerial skills	14%
ICT-related training	9%
Lesson notes	6%
Early Childhood education	3%
First aid/medical/health-related	2%
Other unique content	5%
In-service training (without specification)	29%

Household Education Costs

LFPS are unaffordable to the lowest-income households. Households in the bottom income quintile of our sample spend on average six times as much on education as a proportion of income as do households in the top income quintile. Even though the financial strain of school fees is greatest for low-income households, 86 percent of households list school fees as one of their top three expenses. The households included in this study largely do not respond to financial strain by withdrawing children from school – only about 1 percent of households with at least one child enrolled in a sampled LFPS have out-of-school children who would return to school if it were more affordable. Instead, children temporarily stop attending school when parents are unable to pay fees. Any plan to garner additional revenue should carefully consider the financial burden school fees have on lower-income households.

Finding 7: Children from the lowest-income households are not enrolled in sampled schools.

In order to compare the standard of living and poverty rates between sampled households and the population of Ghana at large, the Progress out of Poverty Index (PPI) was used.¹⁷ The PPI is a 100-point

¹⁷ Household PPI data were also collected in order to corroborate conclusions reached using household income data and account for some of its limitations. Unlike income, asset ownership does not suffer from inflation, meaning that it can be compared more easily over time and across regions. Furthermore, income data do not account for household size, the number of working members of the household, or non-monetary income, such as subsistence agriculture or trade. Finally, income data rely on the

index that measures household asset ownership and reflects the likelihood that members of a household are living below certain income thresholds (Schreiner 2015).¹⁸ On this scale, the maximum score of 100 indicates the lowest likelihood to be in poverty, and the minimum score of 0 indicates the highest likelihood to be in poverty.

Data from the 2012/13 Ghana Living Standards Survey were used to estimate the PPI score distribution of the population of Ghana (Schreiner 2015). The average PPI score for the population of Ghana is 52.5, which indicates that 23 percent of Ghanaian households consume below US\$ 2.50 per day. The mean PPI score for households sampled from LFPS is 64. This score suggests that 9 percent of sampled households have per-person consumption below US\$ 2.50 per day, meaning that households in the sample are 14 percentage points less likely than the average Ghanaian to be living below the US\$2.50 per day poverty line.

The histogram of the two populations presented below demonstrates that households who send children to sampled schools have significantly higher living standards than the average Ghanaian household. Additionally, it demonstrates that the poorest segment of the Ghanaian population is not being reached by IDPRSP or comparable non-IDPRSP schools. Forty-four percent of Ghanaian households have a PPI score below 50, compared to just 10 percent of LFPS-attending households. Additionally, only 2.4 percent of enrollment is drawn from the 25 percent of Ghana's population with the lowest living standards. Evidently, few households in the less-affluent half of Ghana's population can access LFPS.

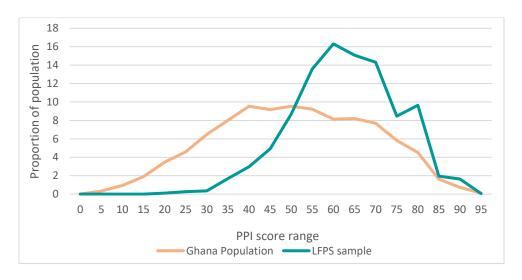


Figure 17. Comparison of PPI score distribution between LFPS sample and overall population of Ghana

imperfect accounting skills of respondents, whereas respondents are more likely to accurately identify their ownership of assets such as mobile phones and bikes.

¹⁸ To calculate the PPI, households were asked questions regarding factors such as household size, education of household head, construction materials of the house, and ownership of assets such as mobile phones, irons, bikes, and cars. Answers are associated with point values, which are summed to calculate each household's PPI score. See the annex for a comprehensive explanation of how scores on the Progress out of Poverty Index are calculated and for tables converting PPI scores to poverty likelihoods.

Finding 8: School fees represent a significant financial burden to most households, but the strain is greatest for those in the bottom income quintiles.

In order to analyze the financial burden that school fees represent to households, total annual income and education expenditure were calculated for each household. Households were divided into quintiles based on annual income. Education expenditure as a proportion of yearly household income was calculated in order to measure the financial burden of education expenses on each household. In Finally, households were asked to list their three largest household expenses. Of the 1,950 households, 20.1 percent said school fees were their largest expense, 29.4 percent listed school fees as the household's second-largest expense, and 35.7 percent listed school fees as the third-largest expense. Only 14.8 percent of the households did not list school fees as one of their three largest expenses.

Figure 18. Yearly household income

Quintile	Income range	Mean annual income	
	(GHC)	GHC	US\$ equivalent
Q1 (lowest income)	12-2,880	1,822	\$455.50
Q2	3,000-5,200	4,235	\$1,058.75
Q3	5,320-8,400	6,830	\$1,707.50
Q4	8,560-12,000	10,767	\$2,691.75
Q5 (highest income)	12,480-72,000	23,611	\$5,902.75

Even though households where children attend LFPS are generally more affluent than other Ghanaian households, the cost of education at an LFPS still represents a significant financial burden to most households. The average household in this study's sample spends 8.2 percent of its income on education expenses. Unsurprisingly, the financial burden of school fees is much higher among the lowest-income households in the sample. Households in the lowest income quintile spend over 18 percent of their income on school fees, while households in the highest income quintile spend on average only 2.7 percent of their income on school fees. Given the large difference in spending relative to income between the top and bottom quintiles, it is evident that households choosing LFPS do not all fit one financial or socioeconomic profile – private school choice is associated with more than just household income.

¹⁹ The 1,950 households that participated in this survey were asked to report on household income and household expenditure on education. A member of each household was asked to list total income from salaried jobs, daily wage work, remittances, and government support. These categories were annualized and summed to calculate each household's total annual income. Of the 1,950 households, income data from 319 were missing. The remaining 1631 households were then divided into income quintiles, where a roughly equivalent number of households was placed into each band.

²⁰ The quintiles are not of exactly equal size because many households have the same reported income at the quintile division points, meaning that all households with that income had to be placed together into the higher or lower quintile.

²¹ Data from 1,506 households were included in this calculation – missing data and discrepancies between household income and education expenditure (i.e. reported education expenditures greater than reported household income) caused the omission of an additional 125 observations.



Figure 19. Annual expenditure on school fees as a percent of total household income

Education experts argue that schooling costs are affordable if a household spends less than 10 percent of total household income on education expenses (Lewin 2007; Tooley 2013). Using this definition, a large number of households are paying education fees that are not affordable. Twenty-seven percent of households for which data are available pay more than 10 percent of their income on school fees. This figure is as high as 36 percent in the Upper East Region, while it is only 14 percent in Western Region. The other three regions fall between 25 percent and 29 percent.

Figure 20. Household income and education spending, by region

	Annual hous	sehold income	Total	Per-child	% of income	% of income spent
	(GHC)	\$US equivalent	education expenditure	education expenditure	spent on education	on education per child
Greater Accra	11,726	\$2,932	568.6	231.2	8.17%	3.79%
Upper East	11,263	\$2,815	653.7	237.9	9.99%	5.36%
Western	10,541	\$2,635	285.8	157.4	5.13%	2.90%
Ashanti	9,195	\$2,299	502.7	212.8	8.76%	4.17%
Brong Ahafo	7,383	\$1,846	459.9	192.5	8.78%	4.25%
Average	9,276	\$2,319	480.5	203.4	8.22%	4.03%

The poorest quintile of households pays on average almost 10 percent of household income on one child's school fees. This means that they are only able to affordably send one child to school. Households in the second income quintile can only affordably pay the school fees for two children. Alternatively, they must either spend more on education than is affordable or diversify their education choices by spending more on one child's education than that of another. Indeed, per-child education expenditures do decrease as the number of children in school increases, although not by enormous amounts. Controlling for household income, annual per-child education expenditures decrease by 8.5 GHC for each additional child the household has in school. While the data do not clarify what sort of household decisions lead to the lower per-child costs, it is possible that households with more children in school economize by having children share transportation costs and textbooks, spend less in categories such as supplemental classes, or send some children to less expensive schools.

Figure 21. Total yearly education expenditure by income quintile (GHC)

	Total cost	Per-child cost	% of income spent on education per child
Q1 (lowest income)	434	191	9.75%
Q2	451	195	4.72%
Q3	443	195	2.88%
Q4	535	226	2.11%
Q5 (highest income)	530	221	1.14%

The large difference in the proportion of income spent on education between the highest and lowest income quintiles is related to the fact that the difference in the absolute amount being spent on education between quintiles is relatively small. The average amount spent on education by the highest-income quintile is only 22 percent greater than the average amount spent by the lowest-income quintile. Education spending does increase with income, but the low elasticity of education spending with respect to income suggests that households view education as a necessity in their household budgets regardless of their income level. There is little expenditure stratification by income among LFPS users, likely because as income increases, many households remove themselves from the LFPS market entirely.

Supplemental costs of education are included in the total cost of education. The various expenses that contribute to supplemental costs are listed below, with the proportion of households who pay for that given expense, and the weighted percentage of each category as a component of total supplemental costs. Roughly 90 percent of households pay canteen, exam, and supply fees. Canteen fees are easily the largest supplemental expenditure item, followed by supply fees. It is interesting to note that only about 15 percent of households pay for transportation.

There is also a significant willingness to pay for supplemental classes, given that over half of all households purchase them. Additionally, purchase of supplemental classes is differentiated by income quintile – 49.5 percent of households in the bottom quintile pay for extra classes, compared to 56 percent in the middle quintile and 58 percent in the top quintile. The expanded provision of additional classes is more likely to increase costs for high-income households than low-income households, meaning that it is a possible avenue to increase revenue while maintaining affordability. This would, however, have a negative impact on equity.

Figure 22. Supplemental education costs

	% who	Weighted % of total
	pay	supplemental cost
Canteen Fees	90.0	47.5
Transportation fees	15.3	7.7
Exam fees	88.2	4.4
PTA fees	48.2	1.7
Supplies	89.0	24.2
Sanitation items	52.1	3.6
Additional classes	53.2	10.9

Box 4. Provision and uptake of scholarships

A vast majority – 79 percent - of schools offer some form of scholarship, although the variety of scholarship differs greatly from school to school. The most common form of scholarship is based on the number of students per family attending the school. 42 percent of schools offer this form of scholarship, followed by scholarships for orphans, offered by 35 percent of schools, and academic merit, offered by 30 percent. The average proportion of students receiving scholarships across all schools that offer them is 7 percent. This proportion is highest in schools which offer scholarships for academic merit, at 9 percent. While scholarship provision certainly increases the affordability of education for some, the proportion of students receiving scholarships is much lower than the proportion of households spending an unaffordable amount on schooling.

Figure 23. School provision of scholarships

42.0	6.28
35.3	6.32
30.7	9.24
25.3	5.5
17.3	5
8.7	-
78.7	6.87
	30.7 25.3 17.3 8.7

Finding 9: Education costs frequently cause children to miss school but only very rarely do they keep children from being enrolled.

For many households, the inability to pay school fees interrupts a child's education. Children in 27 percent of households sometimes miss school because of a shortage of money. This proportion varies considerably by region.

Figure 24. Proportion of households where children miss school because of money shortages

Ashanti	31.4%
Brong Ahafo	21.4%
Greater Accra	42.9%
Upper East	24.7%
Western	16.1%

The likelihood of occasionally missing school because of a money shortage also increases with the number of school-attending children in the household. Each additional school-attending child increases the likelihood of missing school for financial reasons by 3 percent, on average.

Additionally, 77 children, or 2 percent of all children between the ages of 5 and 17, were reported as not being enrolled in school. For 21 of those children, parents asserted that the child would be in school if the financial situation were different, while for 10 children, parents gave reasons related to school quality. For 46 of the 77 out-of-school children, caretakers did not know or did not provide a response.

For one in four households that presently send at least one of their children to a sampled LFPS,²² a shortage of money causes a child to miss school. However, only very rarely – in about 1 percent of households – do financial constraints keep children from enrolling in school. It would seem that the incremental nature of education fees acts as a double-edged sword. Many families are attracted to schools that offer flexible fee payments, likely because it does not require households to have saved up large sums of money for tuition but instead allows them to pay on a daily or weekly basis. This also makes it easier for families to send a larger number of children to school. On the other hand, if a household finds itself without cash on hand to pay incremental fees for school meals, transportation, or tuition, children are unable to attend until the family can again pay the fees. Significantly, children do not miss school to help generate additional income – less than 1 percent of households have children who sometimes miss school to work. Instead, households simply are temporarily unable to pay.

[.]

²² It is important to note that these data only apply to households where at least one child is currently enrolled in a LFPS – data for children that have dropped out of or transferred away from selected schools are not available. 56 percent of proprietors report that students had left the selected schools for financial reasons, although neither the number of school leavers nor whether these students transferred to another school or dropped out entirely was reported.

Chapter 2: Impact Assessment

IDPRSP has provided relevant program interventions that appear to have resulted in greater business acumen among LFPS proprietors. IDPRSP schools have increased enrollment rates, increased the number of classrooms, and improved the general quality of infrastructure since joining the program.

Finding 10: Financial accounting and bookkeeping are perceived to be the most useful IDPRSP training components.

Nearly 45 percent of IDPRSP school proprietors report that the most useful component of IDPRSP training is financial accounting and bookkeeping. Proprietors specifically mention that learning how to manage cash flow, balance books, and track income and expenditures were highly beneficial. After financial accounting and bookkeeping, proprietors mention school management and paying yourself as the second and third most useful training components.

Figure 25. Most useful concepts learned from proprietor training 23

	Frequency	Percent ²⁴
Financial Accounting/Bookkeeping	50	45%
School Management	15	14%
Paying Yourself	7	6%
Importance of teacher training	5	5%
Parent and community engagement	3	3%
Situational analysis	2	2%
Income generation	2	2%
Separation of private and school accounts	2	2%
Sesame workshop	2	2%
Importance of publicity	1	1%
Budget preparation	1	1%
Class management	1	1%
Discipline	1	1%
School cleanliness	1	1%
Importance of graduation day	1	1%
The need to follow GES rules	1	1%
"We are stewards of god" ²⁵	1	1%

These responses suggest that IDPRSP training modules related to financial management and bookkeeping have been successful, due either to content relevance or to the effectiveness of instruction. Forty-one of 110 IDPRSP proprietors claim improvements in financial management and

²³ Citations will not add up to 110. On occasions, proprietors cite more than one response or do not provide a response at all.

²⁴ Percent of 110 schools.

²⁵ IDP Foundation has no religious affiliation. However, Sinapi Aba is a Christian micro-finance institution and references to the Bible is common in the Ghana context. IDPRSP and Sinapi Aba do not discriminate against non-Christian or other religiously-affiliated schools.

bookkeeping are direct results of IDPRSP training.²⁶ Results from regression estimates also suggest that keeping more financial books²⁷ is correlated with greater likelihood of profitability.²⁸ This implies that bookkeeping is a fairly important and relevant training module for LFPS.

According to survey data, training participants have retained the lessons imparted at the IDP sponsored Sesame Workshop, a workshop separate to the IDPRSP proprietor training and one that trains educators with practical strategies proven to help children learn.²⁹ The majority of schools, from a small sample of 37 schools that report having participated in the Sesame Workshop, still use the acquired techniques. Five schools mention using workshop materials and techniques during class lectures, while six report using workshop materials during in-service training. Other proprietors mention incorporating techniques into their management styles, while two school owners specifically mention using learning aids and lesson notes as a result of the workshop. Only two respondents reported not using the materials or techniques taught at the workshop.

²⁶ Other responses include school management (12), Improved teacher (12), Improved/stable finances (8), Enrollment (7), improved parent relationship (5). A full list of responses is found in the annex.

²⁷ Proper use of books was not reviewed as part of research.

²⁸ Profitability is self-reported by proprietors.

²⁹ Please see the annex for more information about the Sesame Workshop.

Box 5: Loan Provision

Of the 110 sampled schools who participated in IDPRSP, 45 percent did not take out a loan with Sinapi Aba. This means that nearly one half of IDPRSP schools only received training. While nearly half of schools who did not take out a loan did not give a reason for doing so, 13 percent of schools sampled did not receive a loan for financial reasons — the interest rate was too high, they did not meet Sinapi Aba requirements, or they had insufficient resources.

Figure 26: Reason for not receiving Sinapi Aba Ioan

	Frequency	Percent
No Reason	19	17%
Already servicing other loans	7	6%
Interest rate is too high	6	5%
Did not meet Sinapi Aba requirements	6	5%
Lack of resources	3	3%
Now intend to get loan	3	3%
Other	5	5%

Schools who did not take out loans but received training were less profitable than those that received loans, but were more profitable than schools that did not participate at all in the program. This suggests that the training alone had a positive effect in school and financial management.

Figure 27: School profitability by loan and training status

	Don't Know	Loss	Break Even	Profit	Frequency
Non-IDPRSP	25%	28%	25%	23%	40
Only Training	33%	16%	16%	35%	49
Loan and Training	16%	12%	33%	39%	61

Schools that only received training are poorer on average, and have worse infrastructure than schools that received loans. The average annual household income is 19 percent lower for schools that only received training, and the average number of students per toilet in schools that just received training is 105, compared to 89 in schools that received loans. In addition, parental satisfaction with infrastructure is higher in schools that received loans and training than in schools that only received training. While the loans certainly contributed to improved infrastructure, they are not solely responsible for the differences between schools that only received training and those that received loans and training. These data clearly indicate that schools that have a greater need for loans – those with inferior infrastructure and a lower-income clientele – are also less likely to receive loans through IDPRSP.

Finding 11: IDPRSP schools are more likely to report profitability than are non-IDPRSP schools.

The survey data suggest that IDPRSP schools have stronger business acumen than their counterparts who are not part of the program. Eight schools specifically mention that their finances have improved or stabilized because of the IDPRSP training. On average, IDPRSP schools have higher total revenue than non-IDPRSP schools. Reported total revenue in IDPRSP schools is almost 73 percent higher than in non-IDPRSP schools. Results from regression estimates also suggest that school profitability is positively correlated with IDPRSP status. 30

In addition, IDPRSP proprietors appear to be far more conservative in their estimation of the financial requirements to implement development projects than non-IDPRSP schools even though they earn more revenue on average and are more likely to make a profit. Only 10 percent of IDPRSP schools report having sufficient resources available, although 23 percent of IDPRSP schools – and 5 percent of non-IDPRSP schools - are planning to explicitly save resources for development projects.³¹

There are two potential reasons for this. IDPRSP schools could have a more realistic understanding of the inputs required to finance development projects and turn a profit than non-IDPRSP schools either due to the influence of IDPRSP training or the pre-determined characteristics of IDPRSP proprietors. Access to Sinapi Aba micro-loans and the associated loan repayment obligations may have also affected their responses.

Figure 28. Availability of resources to implement quality improvement projects

	Overall	IDP Schools	Non-IDP schools
Sufficient resources are already available	13%	10%	19%
Partial resources available/Projects started but stalled (gradual approach)	20%	18%	27%
Not enough resources to start	26%	24%	32%
Planning to use/save existing revenue	19%	23%	5%

Finding 12: Schools have improved their finances, school management, enrollment rates, general infrastructure, and land ownership rates since joining IDPRSP.

About one in ten (11 percent) school owners directly attribute improved school management to IDPRSP training, citing progress in their relationship with teachers and an increased ability to define the roles, responsibilities, and expectations of their staff. Aside from better financial and school management, proprietors report various other changes such as improved teaching, increased enrollment, stronger relationships with parents, and improved nutrition and hygiene practices in their canteen services.

It is important to note that IDPRSP places an emphasis on financial management training in order to enable schools to access loans that were previously unbankable. It is unsurprising, therefore, that

³⁰ These results should be interpreted with caution. Since there are no pre-intervention data on profitability, one cannot directly attribute the difference in results between the two samples as an impact of IDPRSP. Selection bias within the IDPRSP sample could be a reason for the differences. IDPRSP proprietors may have been chosen to join the program based on pre-existing conditions that make them more profitable. Matching non-IDPRSP schools to IDPRSP schools was limited to tuition levels and geography and not business acumen.

³¹ These results could be a factor of multiple reasons beyond IDPRSP involvement. Causal inference to IDPRSP cannot be made.

proprietors cite financial management as a top change. Financial management is likely important not because proprietors are trying to turn a profit, but because they deal with thin margins while seeking to make schools as accessible as possible and staying afloat. An abridged list of changes that proprietors attribute to the IDPRSP training is presented in the table below.

Figure 29. Reported changes as a result of IDPRSP training 32

	Frequency	Percent ³³
Financial Management	41	37%
School Management	12	11%
Improved teaching	12	11%
Improved/stable finances	8	7%
Enrollment	7	6%
Improved client (parent) relationship	5	5%
Infrastructure	5	5%
TLMs	2	2%
Hygiene	2	2%
Diet	2	2%

As a result of IDPRSP working capital or asset acquisition micro-loans, 18 schools improved general school infrastructures such as compound repairs and water, sanitation, and hygiene improvements, 15 schools built additional classrooms, and 6 acquired or refurbished a school vehicle. The table below shows the top-cited changes as a result of IDPRSP loans.

Figure 30. Top cited changes as a result of IDPRSP loans 34

	Frequency	Percent ³⁵
General school infrastructure	18	35%
Additional Classroom	15	29%
Vehicle/School Bus	6	12%
Other ³⁶	5	10%
Land Acquisition	4	8%
Teaching	2	4%
TLM	1	2%
Not Applicable ³⁷	49	-

³² Citations will not add up to 110. On occasions, proprietors cite more than one response or do not provide a response at all. For full table of results see annex.

³³ Percent of 110 schools not total citations.

³⁴ Citations will not add up to 110. On occasions, proprietors cite more than one response or do not provide a response at all. For full table of results see annex.

³⁵ Percent of schools that reported a loan: 51

³⁶ Other results include: Access to internet (2), construction of library, furniture purchase, and borehole construction.

³⁷ Schools that did not report receiving a loan.

Figure 31. Observed changes pre- and post-intervention

Indicator	Observed	Description
	Change	
Business Registration	1	The proportion of schools registered as a business increased from 76% to 80%.
Land Ownership	1	Land ownership of proprietors increased by 21 percentage points, going from 60.5% to 81.6%
Circuit supervisor visits	•	The proportion of schools reporting supervisor visits twice a term or more increased from 56.5% to 71.7%. The proportion of schools reporting supervisor visits once or more per term increased from 78.3% to 95.7%.
Number of Classrooms	1	The average number of classrooms per school increased by 1.8, or 20.9%, from 8.6 to 10.4. Of the 50 schools, 9 lost classrooms, 10 retained the same number of classrooms, and 31 gained more classrooms.
Provision of Junior High School (HS)	1	The proportion of schools with a JHS increased from 44% to 86%.
Provision of nursery/KG	_	All schools for which data were available had nursery/KG and primary levels for both survey periods.
In-service training	1	The average number of days of in-service training per year decreased by 20.6%, from 3.4 to 2.7 for the 42 schools with data available. In 18 schools, the number of days decreased, in 7 it stayed the same, and in 18 the number of days of training increased.
PTA	1	The proportion of schools with a PTA increased slightly, from 74% to 82%.
SMC	1	Conversely, the proportion of schools with a School Management Committee (SMC) decreased from 44% to 22%.
GNAPS registration	1	Baseline data on GNAPS registration are poor, as it is available for only 25 schools. Of these schools, only 56% (14 schools) were registered. The current registration rate for the 50 comparison schools is 92%. Of the 20 schools for which data are available in both surveys, the number of schools with GNAPS registration increased by 30.8%, from 13 to 17.
Toilets	_	The number of schools with toilets did not change – 30 of 39 schools in both survey periods had toilets available for students.
Number of disabled children enrolled	1	The average number of disabled children per school increased by 113% from 0.43 to 0.92.
Enrollment	1	The average number of students per school increased by 16.5%, going from 248 to 289. The total number of students decreased in 22 and increased in 26 schools.

In addition, various indicators were compared to measure change using pre-intervention data and current data for the sample of 55 schools with pre-intervention data. ³⁸ More proprietors in the sample of 55 schools now own land and have, on average, more classrooms and report higher enrollment rates. A summary of the observed change between pre- and post-intervention data are presented in the table above.

Within the sample of 48, the greatest increase in enrollment was observed in the Brong Ahafo and Upper East regions. While the changes in mean enrollments in the Ashanti and Western regions were positive, they were negligible given normal fluctuations in enrollment. The table below summarizes changes in enrollment.

Figure 32. Changes in pupil enrollment by region

Region	Mean change	Number of schools	Minimum	Maximum
Ashanti	9.79	14	-114	219
Western	16.7	10	-187	376
Brong Ahafo	52.06	16	-168	522
Upper East	105	8	-170	377
Total	41.19	48	-187	522

The cause for the changes observed in the IDPRSP schools cannot be solely attributed to IDPRSP. Many local, regional, national and temporal factors affect school outcomes independently from IDPRSP involvement, and many of these changes might have occurred regardless of the IDPRSP. For example, Ghana has been experiencing rapid growth in private school enrollment over the last decade. Rising incomes and increased dissatisfaction with government schools likely drove much, if not all of the increase in enrollment that was measured. Changes in government policies could have caused the increased frequency of circuit supervisor visits, and competition between LFPS likely led many schools to introduce JHS levels. Without a comparable group of LFPS who did *not* participate in the IDPRSP program, it is impossible to say which changes occurred because of the program and which would have occurred without it.

³⁸ Five schools within the sample of 55 were excluded from the analysis because schools either shut-down or baseline data were not compatible.

Conclusion

In view of its expanding reach, the private school sector in Ghana cannot be ignored. This study, which is one of the largest of its kind in Ghana, augments existing research by analyzing attitudes expressed by both sides of the education market. In doing so, it contributes new information on the topics of school cost, education affordability, and the decision-making processes of proprietors and parents.

Several conclusions are evident. Perhaps most importantly, this study disputes the notion that proprietors are ruthless business owners, for whom profit margins trump academic achievement. To the contrary, findings suggest that most proprietors are either breaking even or suffering a small loss, and for those that are making profits, they are often quite modest. Yet despite these financial constraints, LFPS demonstrate **resilience**, owing to their ability to adapt and keep costs, especially teacher salaries, low.

And while these findings may allay concerns that LFPS proprietors are strict profit maximizers, they also reveal that they frequently have trouble making critical improvements in school conditions, which are often substandard. **Poor infrastructure** emerged consistently as the greatest challenge faced by LFPS, in addition to being the most pressing need to improve school quality. Parental satisfaction of current school infrastructure is also low, although it is not the most important factor in choosing schools.

Instead, teacher quality and high academic standards are reported as the top determinants of school quality for households. Our data suggest that proprietors understand the importance of teaching quality as an input to high academic performance, as over 80 percent of LFPS invest in **teacher training.** As a result, the parental satisfaction of teacher quality and academic performance of schools is relatively high.

While LFPS in this study's sample are not reaching the poorest segments of the Ghanaian population, and sampled households have significantly higher living standards than the average Ghanaian household, the **financial burden** of education at LFPS is nevertheless significant for most households and is greatest among those who have multiple children in school and those who fall into the bottom income quintiles.

The proportion of income spent on education rises precipitously both with the number of children and with the level of poverty, to the point that over a quarter of households' spending on education would be considered unaffordable. Any measure that levies additional school fees should be considered carefully. Proprietors should keep in mind that education spending for households with children already enrolled in LFPS is inelastic with respect to household income – poor households will likely pay nearly as much for education as wealthy households, even as it places a much greater burden on their finances.

While it does not appear to be likely that families will withdraw their children from school because of high fees, children are likely to have their schooling temporarily interrupted by the inability to pay fees, which is detrimental to the educational process. Innovative price structures, such as reducing the fees for each subsequent child that a family enrolls, should be encouraged as they reduce household costs while potentially increasing demand and enrollment.

Lastly, the impact assessment reveals that the IDPRPS has had a modest **positive impact** on the financial stability of LFPS. Proprietors from IDPRSP schools benefitted from the financial training on accounting and bookkeeping and are more likely to save in order to invest in future projects. Schools who participated in the IDPRSP are significantly more likely to be **profitable** than comparable schools who did not participate.

Given these findings, IDPRSP is in a unique position to support the development of policies that bolster the education sector. Dissemination of good practices could fill knowledge gaps and encourage **public-private partnerships**, which could take the form of subsidies to LFPS, provision of TLMS, and collaboration on teacher training programs.

LFPS have been subject to significant degrees of criticism. This study suggests that, while significant improvement to LFPS must be made, they have an important role to play in complementing governmental efforts to provide access to quality education. It is hoped that the conclusions from this study can assist policymakers, researchers, and practitioners to identify ways to improve such access in a manner that is both equitable and sustainable.

Recommendations

Based on the presented findings and conclusions, the recommendations that follow aim to further enhance the role of interested donors such as the IDP Foundation in supporting LFPS in Ghana.

1. Conduct routine data analysis and expand data collection.

The availability of quality data on LFPS is low. As a result, those that support LFPS should strive to routinely collect, analyze, and publish program data on access, quality, affordability, and finance. The collection of longitudinal data would be particularly beneficial as it would allow for an analysis of trends over time, bring attention to the topic of LFPS, and serve as a global public good.

As Gurin, Manley and Ariss note, in reference to Sustainable Development Goal 4, "Government agencies and NGOs in many countries are now using open government data to identify locations where new schools may be needed and to assess, publicize, and ultimately improve school quality. By making school quality measures public, these organizations help parents and students learn which schools are best and put pressure on low-quality schools to improve."³⁹

2. Expand access to micro-loans for infrastructure development projects.

Households express relative dissatisfaction with the current state of infrastructure in schools. This need is also recognized by proprietors, who lack access to financing for these improvements. Improved infrastructure is cited as the top priority need for LFPS proprietors. Micro loans provide access to new financing, and 32 of the 110 interviewed proprietors attribute improvements in general school infrastructure to the presence of micro loans. Given their effectiveness and the need expressed by proprietors, the IDP Foundation and other donors should expand LFPS access to micro loans for infrastructure development projects.

3. Invest in efforts to increase teaching quality in order to attract and retain students.

IDPRSP has focused primarily on improving access to education by helping proprietors improve infrastructure and financial and operational management of schools. While parents are generally satisfied with the caliber of teaching, concerted efforts to improve teacher quality should serve as a natural next step for IDPRSP and other LFPS stakeholders.

Although they are able to take advantage of the inherent incentives that drive improved teacher performance in the private sector, LFPS should continue to strive for better teaching quality. Growth of the low-fee private school sector will inevitably lead to competition and schools that are able to distinguish themselves through the provision of high-quality education (measured by more than solely test scores) will continue to thrive. As this report's findings emphasize, parents consider high teacher quality as a key determinant of their willingness to pay for education and school choice. While most proprietors are investing in in-service training, interviews with education experts in Ghana suggest that more can be done to boost the frequency and quality of existing teacher training.

³⁹ http://blogs.worldbank.org/ic4d/sustainable-development-goals-and-open-data

4. Support the development of policies to better integrate government and private education services, primarily through a heightened role in advocacy and sharing of good practices.

Given its network of partners in both the government and private education sectors, IDPRSP is in a unique position to support the development of policies that improve the education sector as a whole. Using the successes of the program as a foundation, IDPRSP could play a knowledge broker role by highlighting successful models, operational modalities, or pricing innovations found in IDPRSP schools and share them with private and public sector stakeholders.

Sharing of good practices and successes could fill a general lack of knowledge in this sector and could inform the development, for example, of clear standards on teacher-pupil ratios, infrastructure, sanitation, and school grounds. For private schools that are compliant with basic standards and that complement government education services in underserved remote or high-density areas, subsidies in the form of teacher secondments, provision of free textbooks and teaching materials, free attendance to government teacher training, and supportive supervision by the education officers could also be included in negotiated public-private partnerships.

Finally, it is unlikely that the poorest households will ever be able to afford high-quality private schools without financial assistance. As a result, key stakeholders should support research and accompanying dissemination on innovative pricing models to ensure sustainability and affordability. As an example, sectoral partners could advocate for the introduction of public-private partnerships such as voucher programs or contract schools in order to lower education costs without making private schools financially unsustainable.

Figure 33. Summary Matrix of Findings, Recommendations, Ease of Implementation and Timeline

Findings	Recommendations	Ease of Implementation	Timeline
Education experts suggest investment in data and the dissemination of IDPRSP reports would provide a public good, and help IDP to determine where to allocate its resources.	Conduct routine data analysis and expand data collection.	Low cost and high effort required.	Long term
 Schools have improved their enrollment rates, general infrastructure, and land ownership rates since joining IDPRSP. LFPS cite poor infrastructure and financial constraints as major challenges. IDPRSP schools are more likely to report profitability than are non-IDPRSP schools. 	Expand access to micro-loans for infrastructure development projects.	Low cost and minimal effort required.	Short term
 Education experts suggest further investment in education quality is needed in LFPS Teacher quality is viewed as a top determinant of school quality by households. Teacher training was the second most-cited priority need. Education costs frequently cause children to miss school but only very rarely do they keep children from being enrolled 	Invest in efforts to increase teaching quality in order to attract and retain students.	Low cost and medium effort required.	Medium to long term
Education experts indicate that IDPRSP is in a unique position to leverage its knowledge of LFPS to advocate for and support the development of policies that pertain to LFPS.	Support the development of policies to better integrate government and private education services, primarily through a heightened role in advocacy and sharing of good practices.	High cost and significant effort required. Would require additional alliance building with other advocates, both in and outside of the government.	Long term

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