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HOUSEHOLD CHOICE OF SCHOOLS IN RURAL GHANA: EXPLORING THE CONTRIBUTION AND LIMITS OF LOW-FEE PRIVATE SCHOOLS TO EDUCATION FOR ALL

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<u>STATEMENT</u>

I hereby declare that this thesis has not been and will not be, submitted in whole or in part to another University for the award of any other degree

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Luke Adorbila Akaguri

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Doctor of Philosophy

Household choice of schools in rural Ghana: Exploring the contribution
and limits of low-fee private schools to Education for All.

SUMMARY

This thesis examines the factors that make the low-fee private school (LFPS) accessible
to the poor. While the provision of education in developing countries has traditionally
been regarded as the responsibility of the state, recent evidence on the growth of the
LFPS in such contexts appears to challenge the government's role as the most viable
option. The main argument of the thesis is that the poor have no real choice. The thesis
also argues that fee-free public education only provides a partial solution to the financial
barrier to access since there are factors other than direct costs that influence the way
poor households respond to principles of supply and demand for education.

The state's role in the provision of education is supported by the argument that it is a
public good, and it must therefore remain the responsibility of the government to protect
the poor and other vulnerable groups from denial of access. Nevertheless, private
education provision is a growth enterprise in rural areas, one key reason for which is the
perception that it provides a better quality of education than the state can offer. Given
such expansion in an era of fee-free public education, some commentators have
questioned whether those that send their children to an LFPS can really be described as
poor, since school choice is clearly dependant on the ability to meet the costs.

In order to understand how the cost and quality of education interact with school choice
decisions, 536 households in three poor rural communities of Mfantseman District,
Central Region, Ghana were surveyed. The data were used to examine the difference in
cost between public and private provision, and to explore those factors associated with
school choice and the related expenditure. In addition, to gain further insight into the

implications of the survey's statistical outcomes, a number of participants with interests in both public and private schools were interviewed – including 38 household heads in the lowest income quintile, 6 head teachers, 14 teachers, 8 parents, 7 Parent Teacher Association (PTA) executives and 3 School Management Committee (SMC) executives with children in both school types.

The findings reject the hypothesis that school choice in the communities under study was not affected by socio-economic factors, since the majority of households had no real option. In particular, the prohibitive cost of food at both types of school, but compulsoriness at LFPSs, had adverse consequences on the willingness of children to attend. However, a minority of poor households that did access LFPSs were able to do so due to school practices such as flexible fee schemes, teacher discipline and better interaction with parents, as well as through assistance obtained via social networks. In addition, the study also finds that private schools had a better track record in BECE examination than public schools in the communities under study. What is clear is that, this better BECE track record by LFPSs coupled with higher aspirations that some poor households have for their children fuelled interest in private schooling.

The study concludes that the claim that the rural poor access LFPS in numbers has been exaggerated. This is because it is the relatively better-off households that enrol their children in private school, while a minority of the poor that access LFPSs are able to do so because of manipulative school practices and the nature of its interaction with parents. As a result, the study suggests that it would be in the interests of the poor if rural public schools were improved – including the provision of free school meals – given that greater state support to the private education sector would only benefit the relatively better off.

Finally, fee-free public schooling facilitated by the capitation grant should ensure that schools are more accountable to the communities they serve – schools should be made to show how the grant was used to improve access and quality and together with the community set targets for improvement. Improving academic quality and teacher discipline would enable them to restore their image in rural communities and hence encourage demand for public education.

Acknowledgements

<u>Dedication</u>

To my wife, Josephine Dare; and children, Ayidaama and Anapoka-Sugru, for being my inspiration throughout this thesis.

To my father, James Akaguri Tia and mother, Akoor Novaari, for all the sacrifices and the pride they took in investing in my education.

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Lists of Acronyms

ADPE	Accelerated Development Plan for Education
BECE	Basic Education Certificate Examination
CREATE	Consortium for Research on Educational Access, Transition and Equity
GDP	Gross Domestic Product
EFA	Education for All
EMIS	Education Management Information System
EPSR	Education Plan Sector Review
FCUBE	Free Compulsory Universal Basic Education
FTI	Fast Track Initiative
GLSS	Ghana Living Standards Survey
GES	Ghana Education Service
JHS	Junior High School
KVIP	Kumasi Ventilated Improved Pit
LFPS	Low Fee Private School
MOESS	Ministry of Education Science and Sports
NGO	Non Governmental Organisation
NFED	Non Formal Education Division
PNDC	Provisional National Defence Council
PTA	Parent Teacher Association
PTR	Pupil Teacher Ratio
SAP	Structural Adjustment Programme
SHS	Senior High School
SPED	Special Education Division
TVET	Technical Vocational Education and Training
UNICEF	United Nations International Children's Emergency Fund
UNESCO	United Nations Education Scientific Cultural Organisation.

Chapter 1: Introduction

Background to the study – my journey to the problem

The journey to this study began in 2006, when I was employed in the National Centre for Research into Basic Education (NCRIBE) in the University of Education Winneba in Ghana. As a researcher in NCRIBE, I had the opportunity to be part of the Consortium for Research into Educational Access Transitions and Equity (CREATE) project. During my work with CREATE, I became sensitised to the issue of low-fee private schooling (LFPS) for the poor in rural areas. Therefore, when I had the opportunity to do a doctorate degree I decided to focus on LFPS and public schools in poor rural areas.

Operating as a fieldwork research assistant for the CREATE project, I had the opportunity to interact with LFPSs and public schools, and also with households that had enrolled their children in both types of school. During my discussions with schools and households, I was puzzled by the decisions of some poor families in terms of the school choices they made. This was because even though the local fee-free public school had better trained teachers and good school infrastructure, some households preferred the LFPS that was situated about 800 metres away from the public school.

With its temporary school infrastructure, the LFPS with no trained teachers yet still charged an average of Gh¢12 (about US$12) per term.[1] In a rural community where the main economic activities were seasonal subsistence farming and fishing, the establishment of an LFPS raised important questions concerning the manner in which such schools operated and the strategies they used in attracting parents to send their children to them. This marked the beginning of my attempt to understand the schooling decisions and choice behaviours of the poor, and how these factors related to their capacity to meet the cost.

Before commencing my journey, my conjecture was that children in LFPSs came from relatively well-off households in the community, who behaved in a similar way to the more affluent urban household when faced with a similar choice between public and private education. However, after making some initial enquiries of household heads, it

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[1] A term is about three months in duration.

seemed that some poor households dependent on a livelihood based on seasonal fishing or subsistence farming were prepared to patronise the private school. Their willingness to enrol their children in LFPSs seemed to suggest that further research was required in order to explore how the poor explained their choice of school, and also how they were able to meet the costs, as the answers to these questions might well have significance to the achievement of education for all.

The more I listened to parents and observed their domestic conditions, the more I became puzzled and interested in enquiring further into poor households and the schools their children attended. In order to do this, I went on to share what I had observed of the LFPS and relevant households with colleagues also involved in the CREATE project in other rural communities of the district. Interestingly, my colleagues had also discovered LFPSs in the communities in which they were working, and had likewise learnt that some poor households were buying into them. All my observations together with those shared by my colleagues seemed to suggest that as far as poor households that exercised school choice were concerned, the abolition of fees was not a sufficient incentive to induce them to choose fee-free public schooling; but that choice decisions might have been guided by other considerations that required exploration.

Since in the context of universal education for all (EFA), the state is mandated as the driving force behind the achievement of this goal, the growing low-fee private education sector in poor rural communities raises pertinent questions in terms of the lessons that the LFPS could teach the public education sector. This point is particularly significant in an era in which public education expansion through a fee-free policy has resulted in low quality public education (Tooley, 2009; Oketch and Somerset, 2010) and consequently has made some households look elsewhere for better education.

Some commentators such as Gulosino and Tooley (2002), and Tooley and Dixon (2007a) have argued that the superior quality of private schools serving poor areas has encouraged their demand and growth. In Ghana, evidence suggests that, in terms of exam results, the perception and reality of the quality of private schools in urban and peri-urban areas tend to be quite well aligned due to better qualified teachers and high salaries, and the fact that they cream off children from better socio-economic backgrounds (MOESS, 2006; GSS, 2005a). However, little is known about the quality of the LFPS relative to its public counterpart in typical poor rural environments.

Therefore, understanding how these schools operate to attract poor households and why the poor respond to demand for such schools should provide significant lessons for policy.

The argument in support of the role of the state as a last resort provider is based on the orthodox economic view that education is a public good and for this reason, the financing and supply of education services must in the main remain the responsibility of the government. Proponents of the state provision of education argue that the benefits of schooling do not accrue to the individual alone but society as a whole. They further contend that in countries in which personal income is low and extremely unequally distributed, and coupled with an inefficient or completely lacking system of credit, allowing market forces free rein in matters of education would result in substantial inequity as the poor would be denied full participation in education (Colclough, 1991; 1996; Bar, 1998; Vossensteyn, 2000).

Recent evidence on the growth of low-fee private schooling in developing countries in an era of fee-free public education (Kingdon, 1996; Srivastava, 2006; 2008; Tooley, 2009; 2005), has rekindled interest in the need to privatise basic education as the solution to expanding access and improving quality. For example, Tooley and Dixon (2007a), and Tooley (2009; 2005) argue that privatising basic education in developing countries is key to expanding access, and ensuring efficiency and quality for the poor.

Such a view is based on the neo-liberal[2] economic argument that resource allocation is better determined by the market, a notion that is particularly relevant to countries in which public resource constraints and misallocation within the education sector fails to promote efficiency and equity for the poor (Plank and Sykes, 2003; Colclough, 1991; 1996; Hinchliffe, 1993). In addition, neo-liberal economists argue that competition generated by privatisation will eliminate the bureaucracy and red tape commonly associated with public education service delivery (Forsey et al., 2008). The emergence of LFPSs in poor rural communities in Ghana appears to have given credibility to these views.

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[2] Neo-liberalism is a set of politico-economic practices based on the argument that human well-being can be improved through nurturing entrepreneurial capacity and skills within an environment in which private ownership of property, the free market and unfettered trade are allowed to thrive (see Forsey et al., 2008: 12). A detailed discussion of the theory underpinning investment in basic education can be found in chapter two of this thesis.

However, others have argued that if the provision of education is left to the forces of supply and demand, as advocated by neo-liberal economists, this could lead to market failure emanating from, for example, externalities and an inefficient or lacking system of credit by means of which people could borrow to finance their children's schooling (Colclough, 1996; Barr, 1998; Vossensteyn, 2000).

As far as households in poor areas are concerned, privatising basic education could result in inefficiency and deterioration in what little equity is enjoyed (Walford, 1994; 1990), as some children would be denied access to schooling due to resource constraints – poor households with more than one child in school would find it difficult if not impossible to sustainably finance the cost of educating all their children in the private sector.

Studies in developing countries have explored the impact of cost on access to education to some extent (Bray, 1996; Chao and Alper, 1998; Colclough et al., 2003; World Bank, 2004; Lavy, 1996; Mingat and Tan, 1986), but little is known about the overall impact of costs on school choice decisions in poor rural areas. The present thesis contributes to the school choice debate by investigating the factors that make the LFPS accessible to the poor in rural areas. It examines household responses to fee-free public education and the growth of low-fee private schooling, and the significance this has for the achievement of EFA. The thesis also argues that fee-free education at the point of delivery is only a partial answer to the monetary barrier, and that other household education cost and non-costs considerations influence the way in which the poor respond to the demand for and choice of schooling in rural areas.

The central focus of the thesis is to investigate the profile of households in rural areas that enrol their children in LFPSs, and what we can learn about how they meet the costs and perceive the value of such education in relation to public schools in the neighbourhood. Additionally, the study explores the manner in which rural private schools operate in a low-income context in order to explain why they might be growing in number in these areas, and whether they are likely to be sustainable in the long term.

Specifically, the thesis addresses the following questions:

1. What factors explain rural households' school choice decisions, especially amongst the poorest?

2. Do LFPSs in poor rural areas provide a better quality of education than public schools in similar environments?

3. How do direct costs of schooling influence household school choice in poor rural areas?

4. To what extent is the LFPS provision financially sustainable in the rural context?

Chapter two continues with a literature review of the factors shaping household demand and choice of public and private schooling respectively; and ends with a description of the conceptual framework of the thesis. Chapter three examines the factors that affect access to education, using the Ghana Living Standards Survey (GLSS) and Education Management Information System (EMIS) data for Ghana. Chapter four discusses the methodology and methods employed by the study. Chapter five examines the socio-economic profile of the district and communities under study. Chapter six examines the main determinants of household heads' school choice decisions. Chapter seven tests the hypothesis that LFPSs in rural areas provide a better quality of education than their public counterparts. Chapter eight examines the structure of household education expenditure, and how it relates to school choice and affordability; it also analyses LFPS revenue and operational overheads. Finally, chapter nine concludes; offers some lessons that may be learnt by public schools and the concomitant policy implications; and outlines areas for further research.

Chapter 2:   Household demand and school choice decision: review of literature.

2.1 Introduction

Ghana's attempt at expanding access to basic education through free and compulsory education dates back to the period before independence in 1957. While these fee-free education policies resulted in increased demand and expanded access to schooling, recent evidence has revealed that the participation gap between children from households in lowest and highest income groups and also between those living in rural and urban areas have continued to persist in spite of fee-free educational policies (Akyeampong, 2009; Rolleston, 2009). This chapter examines the factors that shape poor household demand for and access to schooling. It also discusses the main factors impacting schooling decisions, choice in education and the key factors that explain private school choice.

The chapter begins with a definition of private education and a brief discussion of the growth of public and private education in Ghana. This is followed by the analysis of the relationship between poverty and educational participation in Ghana, and proceeds with discussion on the theoretical debate in investment in basic education. The factors shaping household demand for schooling and the poor schooling decisions are discussed. This is followed by an explanation of school choice and the factors impacting on private school choice. Further, the conceptual framework for the study is also discussed. Finally, the summary highlights key factors that impact on poor household demand and choice of schooling.

2.2 Defining private education

Private education provision has often been associated with the church schools in the past in Ghana. However, the complex nature of private education provision today has made it difficult to define. Kitaev (1999) in trying to define private education adapted the UNESCO definition of private education which defines it broadly as non-public education. That is 'all institutions managed by bodies or individuals other than public authorities'. Hence, Kitaev (1999:43) defines private education as "all formal schools that are not public, and may be founded, owned, managed and financed by actors other than the state, even in cases when the state provides most of the funding and has

considerable control over these schools." Even though Kitaev's (1999) definition provides a basis for the understanding private education, it is unable to make clearer the essential characteristics of public education particularly in the area of funding and degree of control (Lewin and Sayed, 2005).

Private education providers are heterogeneous, numerous and country specific (Lewin and Sayed, 2005; Rose, 2007). They include: Non-Governmental Organizations (NGOs) either for profit or not-for-profits; faith based organizations; philanthropic associations and commercially oriented private entrepreneurs (Kitaev, 1999; Lewin and Sayed, 2005; Rose, 2007; Lewin, 2007a). The not for profit NGOs, Philanthropist and Faith Based Organizations are financed by the individual, donors or corporate sponsorship and missionaries in the case of the mission schools. Again, faith based organization may be grant aided by the state through the payment of teachers' salaries, while ownership and management remain in private hands. Commercial operators referred to as private entrepreneurs or 'edu-entrepreneurs' are financed from fees and other contributions from parents (Rose, 2007).

In theory the state is supposed to have regulatory control over all non state education providers, but in practice, however, this control is very limited in Ghana, particularly in the area of fixing of fees (MOE/GES, 2001). Moreover, the growing unregistered private education providers have made it more difficult for government to monitor their activities (MOES, 2006).

Bangay (2007) argues that Kitaev's (1999) definition of private education though comprehensive lacks the conceptual individual framework with which to make comparison between schools. Bangay (2007) identifies three criteria for categorizing schools which enables comparisons between schools. These categories are: schools with high degree of financial and managerial independence; schools with significant state financial support but minimal government managerial intervention; and finally schools with predominantly non-state finance but medium levels of government managerial regulations (Bangay, 2007). The first category of private schools with high degree of financial and managerial independence is the focus of this research in Ghana. In other words, private education used in the context of this research is the formal school that is not public, registered or unregistered, founded, owned, managed and financed by a private individual or group (Srivastava, 2008b:4).

This thesis focuses on the Low-Fee Private (LFP) schools' sector in rural areas of Ghana. It is significant to note that, the LFPS sector in Ghana, like in many other developing countries, has not been officially defined by the state. Srivastava (2008a:97) studying LFPSs in rural India defined it as:

> *occupying a private unaided sector..... targeting disadvantage groups, entirely self-financing through tuition fees, and charged a monthly tuition fee not exceeding about one day's earnings of a daily wage labour at the primary and junior levels........*

In the context of this thesis and following Srivastava (2008a), LFPSs are defined as private schools targeting households in poor rural communities, entirely financed through tuition and extra class fees, and charging termly tuition fees less than 4 days' earnings of a daily wage [3]labour at basic schooling level.

2.3 The growth of public and private education in Ghana

The development of education in Ghana dates back to the colonial times when the Christian missionaries established schools to facilitate their evangelism. However, education took a dramatic turn when in 1925, Sir Gordon Guggisberg the colonial governor, came out with a comprehensive policy for education development in the colony. The new policy gave to the state ultimate control over schools. Private education, mainly the church schools, was to be regulated and given subsidy by the state. Guggisberg argued that education cannot be compulsory and free because 'free education without compulsory education could not be organised fairly' (McWilliam and Kwamena-Poh, 1975: 58). Clearly, making basic education free and compulsory would lead to expansion in enrolment, but given the inadequate supply of qualified trained teachers, the quality of education could be grossly compromised. Guggisberg is said to have stated on one occasion "that during his time the government could have afforded to spend three times as much as it actually did on new school buildings, but he based new openings firmly on the number of trained teachers available" (McWilliams and Kwamena-Poh, 1975: 59).

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[3] School fees are paid termly and a term is three months. The daily wage for casual labourer in agriculture in the study communities is Gh ¢3 ($3) (price of labour is in 2008 prices ie when survey data were collect from study communities).

The depression of the world economies in the 1930s which affected the Gold Coast economy led to the reduction in education expenditure. This era also witnessed the development of private schools including Accra Academy established in response to demand for education. By the 1951, the number of 'private' or 'unofficial' schools was reported to have exceeded the approved ones (McWilliam and Kwamena-Poh, 1975). Thus, even before Ghana's independence in 1957 private education was an integral part of the educational system and the issue of quality and cost were key in the education policies and implementation.

Prelude to Ghana's independence in 1957, there was mounting pressure for the expansion of education. This resulted in the implementation of the Accelerated Development Plan for Education (ADPE) in 1951. The implementation of the plan for the first time abolished school fees but textbooks were paid for by parents. But after independence, education expansion policy was driven by Nkrumah's socialist agenda - free basic education was given further impetus through the 1961 Education Act[4] as all charges including fees were abolished.

The concomitant effect of the free compulsory universal basic education was massive expansion in access to basic education. Hayford (1988) estimates enrolment increase in basic education between 1951-1966 to be about 642% and 304% for primary and middle schools respectively. However, this massive expansion was later accompanied with wide spread perception by the general public that the quality of education had deteriorated. Consequently, there was a re-emergence of some private providers in places like Accra and Kumasi (McWilliam and Kwamena-Poh, 1975).

An educational review committee set up to investigate the cause of general dissatisfaction reported in 1967 that standard of Ghana's education had declined since 1957. The report defined educational standards to include: "level of academic achievement, quality of teaching and learning, efficiency of supervision, adequacy of staffing, accommodation and equipment and norms of discipline and behaviour in an educational institution" (McWilliam and Kwamena-Poh, 1975:166-167). The deterioration in educational standard was blamed on the implementation of ADPE without adequate qualified teachers and school supplies. The fall in educational standards led to a decline in enrolment after 1966 and this was more evident in the

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[4] Education Act of 1961 introduced fee-free compulsory primary and middle school education

northern part of the country because of increase in private sector provision in the middle and southern sector of Ghana (McWilliam and Kwamena-Poh, 1975).

In the early 1980s, the Ghanaian economy was in total disarray. Export earnings had declined drastically due to the falling world market price of cocoa, world crude oil prices had shot up, major infrastructure such as roads, schools, hospitals and telephone services were in a shambles and real income of public sector workers particularly teachers had slumped. As a result, many teachers migrated to neighbouring countries particularly to Nigeria to enjoy the prosperity that came with the oil boom. The country faced yet another disaster when it was hit with famine in 1983. In the same year about one million Ghanaians were deported from Nigeria (Adepoju, 1993).

Difficult economic conditions compelled the Provisional National Defence Council (PNDC) government to accept the World Bank's economic package, Structural Adjustment Programme (SAP) in 1983. The SAP came with conditionalities including the liberalisation of the economy and removal or reduction of subsidies on essential public services like health and education. With a liberalised market environment, fees were reintroduced in all public schools. This occurred at a time when confidence in the value of public education was at its lowest ebb. Adepoju (1993:26) notes that "drop outs were better off becoming 'businessmen' than staying at school". Inadequate teachers in the classrooms, lack of teaching and learning materials and poor salaries impacted negatively on education as dropping out of school and absenteeism became the norm. The introduction of school fees due to the economic liberalisation made it more difficult for poor parents to enrol their children in school. While some households could not see the relevance and value of enrolling their children, those who could afford it enrolled their children in private schools. According to Addae-Mensah (2000), this served as a basis for social stratification as some households particularly those in the cities like Accra, Kumasi and Takoradi were able to enrol their children in good quality private schools. By 1987 the government had to embark on a comprehensive reform to improve education.

The 1987 reform benefited from substantial financial investment. In total, the 1987 educational reforms and the Free Compulsory Universal Basic Education (FCUBE) reform was supported with over $500 million in US World Bank credit facilities to expand access and improve quality (World Bank, 2004). Although this investment has

led to some improvement in access, it is estimated that about a fifth of all children, the majority of whom are from the 'ultra poor' households in Ghana are still not in school (MOESS, 2006). According to the Ghana's Education Sector Performance report, 2006, total national primary completion rates increased, but marginally, from 77.9% in 2003 to 78.72 in 2004, while completion for those who started the Junior Secondary School (JSS) increased from 58% in 2003 to 60% in 2004. In 2005 when fee-free education was introduced, the completion rate rose to 81.2% but declined to 69.6% in 2006 (MOESS, 2008). For those who complete the basic cycle, about 80% are unable to go beyond JSS (MOE, 1999; Addae-Mensah, 2000; MOESS, 2006).

The question is what difference has this massive investment in basic education made on low income households who may lack the means to support their children at school? Several supply side interventions have been made by government and non-governmental organisations in the form of food for girls' enrolment (Yidana, 2000), school feeding programme and the capitation grant policy (MOES, 2006). All these interventions have been aimed at expanding access to basic education. However, the question often asked is whether these interventions are sustainable, as they are often donor dependent. Another issue is whether interventions that result in the reduction or elimination of direct costs really lead to 'propoor' outcomes and what effects they have on demand among different social groups.

The introduction of the GH¢3 cedis ($3 US) capitation grant per child in public basic schools in 2005 resulted in a massive increase (17%) in enrolment in all grades. However, according to the MOESS (2006), the massive increase is not matched with a corresponding increase in the number of classrooms, teachers and teaching learning materials, creating difficulties for quality education delivery. According to the Ghana's Education Sector Review Report (ESRP), while some parents responded to the fee-free schooling policy in 2005 by moving their children from private to public school, others parents moved their children from public to private (MOESS, 2006). Even though it is not evident where the movement between the two school types were concentrated, clearly parents responded differently to fee-free capitation policy. More importantly, the use of a single allocation formula where socio-economically advantaged and disadvantaged districts received the same amount per child made the capitation regressive (Akyeampong, et. al., 2007).

In summary, before Ghana's independence in 1957, education was mainly provided by the church but with regulation from the state. The state provision of education was scaled up six years before independence following the implementation of accelerated development plan for education (ADEP) in 1951. After independence, Ghana's education policy was driven by a socialist agenda and primary and elementary education were made free. However, the liberalisation of the Ghanaian economy in the late 1980s coupled with the 1992 constitutional provision that gave individuals the right to establish and maintain private schools (MOE/GES, 2001) contributed to the growth of private schools and provided choice to those that could afford the cost of private education.

2.4 How does poverty relate to school participation in Ghana?

The relationship between household poverty and child school participation has been well documented in many studies (UNESCO, 2007; Colclough, et. al., 2003; GSS, 2000). However, before delving into the nature of this relationship, it is worth examining first, how poverty is defined in international and the Ghanaian contexts.

Generally, poverty is defined in terms of income, consumption or expenditure (Webster, 1984; Rose and Dyer, 2006; GSS, 2007). Poverty has also been defined in the context of basic need measured by human poverty index which concentrates on life expectancy, knowledge and decent standard of living (World Bank, 1999). However, the correlation between basic need poverty and income poverty can be as low as 0.45, suggesting that each measure of poverty could produce different pattern of socio-economic composition of people living in poverty (UNICEF, 2000). Hence, no single measure of poverty is capable of capturing its multi-dimensional aspects. Harma (2009) measured poverty using asset, income and standard of living index and found that each of the poverty measure was significant and constrained poor households' capacity to participate in education.

The World Bank defines poverty as individuals living below $1 US per day (expressed in Purchasing Power Parity of 1985). This raises a pertinent question of whether a household that has its members earning more than a dollar per person per day, but is unable to enrol its children in school should be considered non poor? Understanding

and responding to this question would depend on the interpretation of poverty and other social and cultural factors that influence households' schooling decisions.

In Ghana poverty has been defined in several ways at different times by the Ghana Statistical Service – for example, the Ghana Living Standard Survey I and II (GLSS I and II) defined poverty by income, while GLSS III, IV and V define poverty in terms of consumption (GSS, 2005; 2008). In their estimation of poverty in Ghana, the GSS (2007) indicated that the overall poverty line, which captures food and non-food requirement of ¢900,000 cedis per equivalent adult per year in Accra in 1999 constant prices, represents roughly $1 dollar per day which is equal to the amount stipulated by the world Bank (World Bank, 1995). Thus, poverty as used in this thesis is based on GSS (2007) definition of a dollar per person a day. Since the cost of education constitutes a barrier to access to schooling in Ghana (Oduro, 2000), coupled with the fact that the poor in Ghana are disproportionately represented by the rural population – as over 80% of the poor in Ghana live in rural areas (GSS, 2008), this would impact on the school participation gap between the poor and non poor (Boateng et al., 1992) within and between rural and urban areas of the country.

Studies have shown that poverty reduces the likelihood of basic school participation and that children from non-poor households have more access to education than those from poor households (Boateng, et. al., 1992; GSS, 2000; UNESCO, 2007). Evidence from a number of countries in Africa shows negative correlation between household poverty and primary school attendance rate (UNESCO, 2007:48), and individuals with no education can only receive low wages and therefore are likely to be poor (Boateng, et. al., 1992). Moreover, private costs of education in the midst of poverty, as well as cultural and social norms impact on households' decision about whether or not to enrol a child and whether a boy or a girl should be sent to school (Harma, 2008). What is not clear is whether the so called poor households in the rural areas in Ghana that are enrolling in private fee paying schools are really poor? If they are, this could have implications for household expenditure patterns and also the child's sustained school attendance and completion.

As noted earlier, the provision of private education in Ghana has often been the preserve of those living in urban areas like Accra and Kumasi. However, recent evidence in the basic education landscape in Ghana shows the upsurge of private basic

schools in some peri urban and rural communities (Tooley, 2009; Tooley and Dixon, 2007a; 2007b; MOESS, 2006). Gulosino and Tooley (2002) in their study into private sector education serving the needs of the poor in Philippines identified five gaps in public education: access, coverage, internal efficiency, learning conditions and quality and argued that these gaps have been responsible for the flourishing low fee private schools. Data from the Ministry of Education indicate that the private sector of education has been making significant contribution to basic education enrolment (MOE/GES, 2001; MOESS, 2006). In 2005, private school enrolment contributed about one fifth (24%) of total national enrolment in basic education[5] sub sector (MOES, 2006).

Current evidence suggests that the number of schools including low-fee private schools have been growing in an era of fee-free education. For example, studies in Ghana suggest a growing low fee private education sector (Tooley, 2005). In the Ga West District of Ghana, Tooley and Dixon (2007a) have found that only 25 percent of the total 779 schools were public schools. The remaining schools were private unaided and unregistered (22.7%) and registered private and unaided (52%). Data from the Ghana Ministry of Education and Sports (2006) indicate increase in the number of private basic schools with percentage share of total national basic schools of 43%, 25% and 23% for pre-school, primary and junior secondary schools respectively in 2004.

But in spite of the number of private schools in Ghana, Akyeampong's (2009) analysis indicates that private schools' share of enrolment of school age children is just about 17 percent. However, this proportion of private sector enrolment might be misleading because data on private schooling derived from Education Management Information System (EMIS) actually understate the number of private schools and their enrolment shares in the country - unregistered private schools are not captured by the EMIS in Ghana as evident in Tooley and Dixon's (2007a) study. Therefore, private schools' share in enrolment could well be greater than 17 percent.

Analyses of GLSS 4 and 5 data show that between 1998/99 and 2005, poor households in urban and rural areas increased their participation in private schooling from about 3.5 percent in 1991 to about 10 percent in 2005 (see chapter 3). The critical question this

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[5] Basic Education in Ghana ends at grade 9

raises is why have some poor households in rural communities chose to enrol their children in fee-paying private schools which have poor infrastructure and untrained teachers rather than in a fee-free and well resourced public schools that have professional teachers and much better infrastructure. It is significant to note that, Tooley and Dixon's (2007a) claim that private schools in Ga West district were performing better than public schools in Ga West must be taken with caution. This is because Ga West district is located close to the capital Accra and by virtue of its location has better economic opportunities than would be for a typical rural community (Rose, 2007), where household survival needs may depends mainly on seasonal farming and/or fishing. If poor households are enrolling their children in private schools, then this raises questions about which critical factors influence the decisions and the tradeoffs in terms of investment choices. The relationship between poverty and school participation in Ghana is depicted in figure 2.1.

Figure 2.1: Poverty and school participation in Ghana.
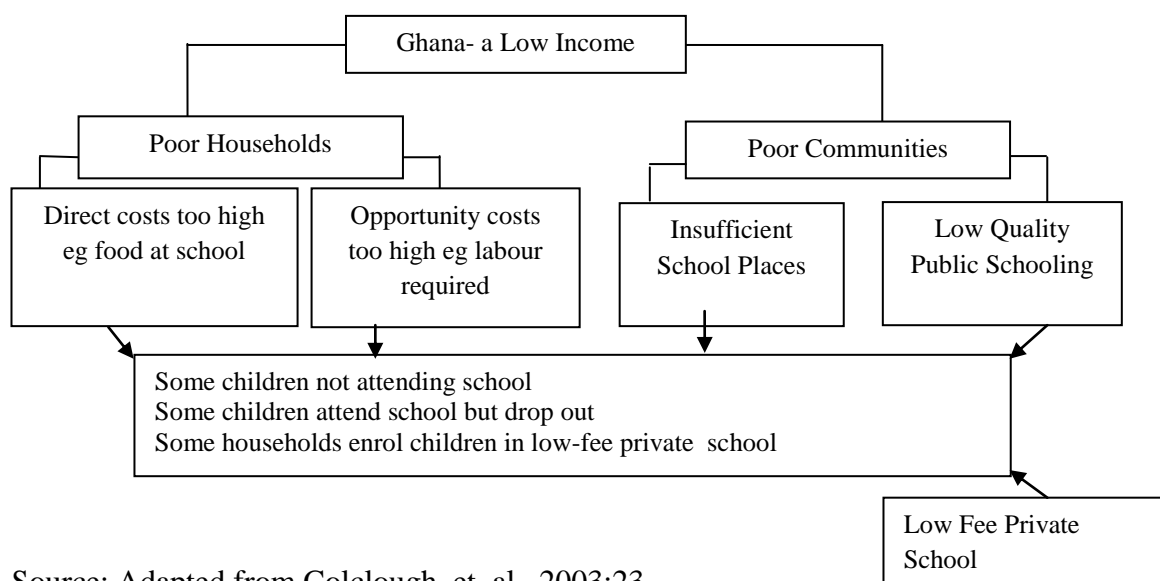
Source: Adapted from Colclough, et. al., 2003:23

Poverty interacts with schooling at the household and community levels and where access to the existing state provided community basic schools are of similar quality, the reason for the poor not to participate in education would be due to the costs and/or the poor quality of education (Colclough, et. al., 2003). Poor households may find that the

direct and opportunity costs[6] of schooling are too high, resulting in no participation. On the other hand, where there exist LFPSs in communities where the publicly provided education is perceived to be of low quality, some poor households particularly those that are eager to increase their participation in education, may enrol in private schools, especially when they perceive them to be of superior quality and more responsive to their needs.

Evidently, the above analysis of the relationship between the poor and their educational participation in Ghana has shown that, poverty remains a barrier to access and choice of schooling. Where publicly provided education is perceived to be of inferior quality compared to their private counterparts, some may be compelled not to enrol or find alternative schooling. In this thesis, I argue that truly private schools financed from fees cannot increase participation of the poorest since they cannot afford the costs.

2.5 Public and private education provision and partnership in Ghana.

The nature of public and private education provision and partnership in any country can be understood in terms of the relationship between the sources of funding and provision. Klein's (1984) conceptual model of modes of welfare provision and funding is useful in explaining the modes of education provision and partnership. Figure 2.2 shows the model.

Figure 2.2: Modes of welfare provision and funding

		Finance (funding)	
		Public	Private
Production	Public	1	2
(provision)	Private	3	4

Source: Klein (1984): cited in Whitty and Power (2000).

Figure 2.2 shows that in countries where education provision is firmly controlled by the state cell 1 depicts the nature of education production and financing. This type of

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[6] See section 2.6 of this chapter for detailed discussion on direct and opportunity costs of school and household demand for schooling

provision is commonly associated with mass education systems (Whitty and Power, 2000) where partnership does not exist because the state assumes full control of funding and provision of education services. This was the case in many independent African countries including Ghana. In recent times, however, many governments have reformed their education system and therefore have allowed private sector participation through a number of ways including: charging fees previously paid for by the state (cell 2); allowing the private sector to run schools while the state pays for the services (cell 3); selling public services and transferring their functions to the private sector (cell 4); and finally embarking on liberalisation that allows the private sector to compete with the public sector (cell 1/4) (Whitty and Power, 2000).

The growing private sector involvement in education is taking place in a quasi-market where the purchaser of education is separated from the provider, but remains highly regulated by the state, in terms of, new providers, curriculum, charging of fees and school practices. The liberalisation of the Ghanaian economy in the 1980s together with the constitutional provision in 1992 made it possible for individual (s) to set up and run their own schools at their own cost (MOE, 2001). As a result, private schools in Ghana are not provided with funding from government, but are in theory allowed to operate within a centrally determined regulatory framework including charging of fees, licensing of new providers and school operational policies such as corporal punishment. However, lack of enforcement of government regulation has resulted in the opening up and operation of a number of private schools contrary to the regulation, particularly, in the area of entry of new providers and charging of school fees.

Patrinos, et. al. (2009) describe the type of public-private partnership (PPP) in Ghana as 'nascent' PPP environment because of absence of public budgetary support to private schools. Thus, both public and private schools are independently responsible for providing school infrastructure, hiring of teachers and other related services. Households or parents have a choice to enrol in public or private school. This type of partnership does not promote equitable access due to factors such as affordability, school entry requirements and distance (Patrinos, et. al., 2009). This thesis will explore how the poor afford the cost of low fee private schools in the rural area.

2.6 What theory underpins the privatisation of education?

From the neo-liberal economic point of view, education like physical capital must attract a price because investment in education and training tend to produce benefits beyond its cost (Psacharapolous, 1994; Woodhall, 1987). The human capital theory was first introduced by the classical economists including Adam Smith, but was later popularized by Shultz (1961), Friedman (1962) and Becker (1965) (cited in Psacharapolous, 1994:1). According to the neo-liberal economists, individuals and households that invest in education acquire the means of production which raises their earning potential and provides them with better job security than their counterparts who do not have education (Friedman, 1962). The neo-liberals further argue that the private rate of return on investment in education in developing countries, in terms of costs and benefits, on the average tend to be high (Psacharopolous, 1994). Hence, individuals who benefit from education should at least be made to contribute to it. Even though earlier rate of return analysis on schooling by Shultz (1988) indicated higher returns to basic education than post-basic education, recent analysis of the rate of return have revealed the contrary in Ghana (Palmer, et. al., 2007).

The strength of the neo-liberal economic argument lies in the operation of the market – that free market education ensures efficient and equitable allocation of both public and private resources. Colclough (1996) identifies three key issues which he believes have encouraged proponents to argue for market solutions to education in developing countries. Firstly, governments of most developing countries are more concerned about winning elections than providing equitable and quality education. Secondly, insufficient resources available to governments makes it difficult for government to achieve general expansion of access at acceptable level of quality, and finally misallocation of resources within the education sector, where a greater proportion of government budget is allocated to tertiary and secondary education at the expense of basic education, widens inequality as those who access post-basic education, including senior secondary and tertiary institutions, are mainly from middle and upper class families (Addae-Mensah, 2000; Johnston, 2002). Thus, the neo-liberals propose fee-paying and the establishment of more private institutions to free up public resources to support poor households and other vulnerable groups in the society (Colclough, 1996; Steel and Sausman, 1997; Lincove, 2007). Recent evidence on the low quality of public basic education provision in poor districts in developing countries due to the fee-free education, appears to have

given credence to the neo-liberal economic argument – to privatise basic education in developing countries (Tooley and Dixon, 2007a; Tooley, 2005; 2009).

It is significant to note that, in the developed countries because the capacity of the public education sector is large enough to absorb most school age children, private education would only serve households seeking differentiated demand (Lincove, 2007). But in the developing countries where there exist insufficient schooling places and where the perception of the quality of public education is low, private schools in poor rural areas could provide access to some households. Studies have shown that the supply of public schools impact on the quality of private schools – insufficient public school places leads to the growth of low quality private schools that have no competitive incentive to provide quality but to fill the gap (Bray, 1996; Lincove, 2007; Oketch, et al., 2009). But in spite of all the arguments by the neo-liberal economists, there still remains a place for government participation in education. This is because if the provision of education is left to the forces of demand and supply, that could lead to market failure in the society. Market failure could emanate from the external benefits of education, capital market imperfections, equity considerations, households decisions and low private demand for education (Colclough, 1996; Barr, 1998).

External benefits of education, which are the effects of education on society other than what accrues to those who invest in it, could include the presumed relationship between education and economic growth, increased earnings and non-monetary benefits such as crime reduction, increased social participation and lower fertility (Barr, 1998; Rose and Dyer, 2006). Since households may not take into consideration these external benefits when deciding whether to send a child to school or not, this could lead to household under investment in education. Consequently, public investment could prevent such under investment (Barr, 1998; Akaguri, 2006).

Societal failure which emanates from market imperfections is based on the view that investment in education involves risks for poor households, who are uncertain of the future benefits of their investment (Geske and Cohn, 1998; Chao and Alper, 1998). Besides, poor households are unable to access credit due to strict credit requirements by banks and other lending institutions. Where lending institutions are willing to provide credit to these households, the premium on top of the market rate of interest may serve as serious disincentive to household borrowing to meet educational costs. To overcome

the credit constraint faced by poor households, governments have intervened through the provision of fee-free education and other subsidies such as the school feeding programme and scholarships (MOESS, 2006) to enable vulnerable groups including poor children and girls have access to education.

Equity consideration, which is the extent to which education does or should redistribute from rich to poor or between different social classes may necessitate the need for government intervention in education (Barr, 1998; Vossensteyn, 2000). Equity can be defined in terms of lifetime position or moment of attendance (Vossensteyn, 2000). The lifetime position definition is based on the fact that education increases the future earning potential and job security of the household. Thus, those who benefit from education should pay for it. Equity at the moment of attendance, however, is based on the principle that, all households irrespective of their social and economic background must be provided with equal opportunity to access education. Consequently, financial incentives in the form of free tuition and programmes such as free school meals and uniforms and textbooks targeted at the very poor have the potential for increasing participation in education by these vulnerable individuals and households. Where the price of education is raised beyond the reach of these very poor households, the likely effect might be under investment in education resulting in market failure in the society (Vossensteyn, 2000).

The principal decision making unit about whether to send a child to school or not is the household, headed by parents and guardians. Households' decision to enrol a child in school is often weighed against the potential benefits and costs to the household. However, the rate of return to education analysis compares the return to pupil (the child) to cost to households. The result is that, some households are reluctant to invest in education, simply because what they perceive to accrue to them is not really commensurate with their investment, even if the economic returns are quite high (Colclough, 1996). Hence, some public investment will be required to reduce the effect of schooling costs on such households.

Moreover, low private demand for education resulting from cultural, religious and other ideological beliefs could negatively impact on access to schooling of girls and certain population groups. The low private demand could worsen with the introduction of an education market in such environment. To activate demand for schooling by this

vulnerable group, government intervention in the form of targeted bursaries, vouchers, food for girls' enrolment and feeding programmes would be able to raise enrolment in among these vulnerable groups (Yidana, 2000; Colclough, 1996; Rose, 2007).

Basic education as a right has long been recognized as a fundamental human right. The convention on the right of the child states clearly that no child should be deprived of access to education (UN Universal Declaration of the right of the child: cited in Akyeampong, et al., 2007). Article 28 of the Universal declaration of human rights in 1948 states that primary education shall be compulsory and available free to all (UDR: cited in MOE/GES, 2001). In Ghana, right based education was enshrined in article 8 of the 1992 constitution, which provides that basic education shall be made free, compulsory and available to all. However, the critical issue is whether right based approach to basic education would ensure access to all children particularly to poor households. This is because where poor households cannot be guaranteed with good quality education they might be reluctant to enrol their children in school even if it is free (Akeampong, et. al., 2007).

In conclusion, privatisation of education is based on the theory of the market. The case for marketisation of education in developing countries has resulted from claims that academic quality in public education sector has deteriorated (Tooley, 2009; Tan, 1998). Thus, marketisation of education through growing involvement of the private sector would increase competition and choice (Patrinos, et. al., 2009; Whitty and Power, 2000), leading to quality education provision and ensuring equity to the poor. Notwithstanding the benefits of marketisation, private sector participation in education could worsen the existing inequalities as schools become more selective (Ball, 1994) and therefore tend to draw children from better socio-economic better backgrounds (Harma, 2008; Walford, 1994). Besides, some schools in the market may not be in the position to compete on equal terms with others due to differences in resources and home background of children. Hence increased competition may not necessarily result in improved academic performance for all children (Tan, 1998). Clearly, a truly marketised education provision in poor rural environment could result in a two-tier system where those that can afford and have strong voice choose private schooling leaving the poorest whose voice is weak in the public sector. This could have implications for equity and the achievement of the education for all.

2.7 What factors shape household demand for schooling?

Studies have identified a number of factors shaping household demand for education. However, this review focuses on the key factors impacting on the poor demand for and access to schooling in Ghana. These key factors include income, household size and number of children in school, costs of education, occupation of household head, religion of household, distance to school and the quality of education.

Household income

Education could be a consumption or investment good (Colclough, et. al., 2003; Bray, 1996). When households view education as an investment good, the decision to send a child to school is usually influenced by their perception of its value in relation to the investment (Bray and Bunly, 2005; Kitaev 1999; Bray, 1996). Some researchers have argued that if households perceive schooling as an investment good, then household income in principle should not directly affect the decision to invest in education (Colclough, et. al., 2003; Behrman and Knowles, 1999). In reality, the non-poor households are more likely to have better information about the benefits of education and quality of schools and therefore are more likely to take risk in investing in their children's education (Goldring and Philips, 2008; Bray and Bunly, 2005). In contrast to the non poor households, for poor households if sending a child to school represents a significant proportion of their income then that decision weighs even more heavily and may result in household deciding not to enrol (Lewin, 2007a; Akyeampong, et. al., 2007), particularly when they perceive the quality and for that matter the returns to schooling as doubtful.

Further, where education is considered as a 'normal' consumption good, improvement in household income is expected to induce demand for schooling. Some studies have assessed the relationship between households' ownership of economic assets and demand for schooling. For example, Harma (2008) and Kingdon (1996) found that in rural and urban India respectively, household owning economic assets were more likely to enrol their children in private schools relative to household without such economic assets. Non poor households demand for child labour is relatively low compared to the poor. This is because the relatively high income of the non poor households gives them the capacity to pay for labour services or labour saving devices, and consequently

reduce the opportunity cost of the child's schooling (GSS, 2003; Glick and Sahn, 2000). In addition, the possession of social capital [7] impacts on the demand for schooling (Goldring and Philips, 2008). Thus in rural areas, households that have a social network of friends and relatives that support their children schooling are likely to be able to access schooling and participate in school choice. Given that, for example, the majority (49%) of the rural households in the study district of Mfantseman in the central of Ghana are engaged in peasant subsistence farming and fishing (GSS, 2005b), this raises critical concern about how these households with their subsistence and unstable income could afford the cost of schooling, particularly in the LFPS sector. Clearly, income is a constraint to poor households' demand and choice of schooling and households with economic and social capital have better chances of participating in education than those without such capital.

Household structure

The size of a household and the number of children from a household actually in school could significantly impact on household demand for schooling either positively or negatively (Colclough, et. al., 2003). Large household size with most being adult members has the advantage of raising more income and providing other support to the household and this has the potential of enhancing children chances of going to school. For example, Mason and Rozelle (1998) note that in rural Java in Indonesia, older siblings worked to support the education of their younger siblings. In Tanzania, Al-Samarrai and Reilly (2000), after controlling for household size found that having more children in the household increases the likelihood of a household sending a child to school in rural than in urban areas (Colclough, et. al, 2003). What the above studies suggest is that, large household size in rural areas could be beneficial in ensuring school age children access to schooling because it allows household chores to be spread among children or undertaken by adult members of the household. However, a household with large number of school age children in school could impose costs burden on the households, especially for households that have fewer adults but a large number of children of school going age. As noted by Jocaby (1991), where a household faces

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[7] Social capital is the ability to gain access to resources by virtue of the connections between individuals or membership in social networks and other socials structures (Coleman, 1988 cited in Goldring and Philips, 2008)

credit constraints, the number of children in the household affects household capacity to invest in education as children compete for limited pool of household resources needed to finance education. Given that the poor tend to have more children than the non-poor (Harma, 2008), the number of children a poor household have in school could impact on their demand and school choice.

Furthermore, the birth order of a child and the relative age of siblings influence the demand and decision of who goes and to which type of school (Colclough, et. al., 2003). Recent studies by Rolleston (2009) in Ghana and Harma (2008) in rural Uttar Pradesh in India indicate that birth order influenced the pattern of household demand for schooling. Children with siblings and earlier in the birth order have the greater likelihood of being enrolled in school (Harma, 2009; Al-Samarrai and Peasgood, 1998). However, others have argued that, in developing countries, when substitutes for child labour such as adult siblings are available in the household, it releases children from household chores and this enable them to access schooling (Glick and Sahn, 2000; Al-Samarrai and Peasgood, 1998; Chernichovsky, 1985). Given that in rural areas, some households prefer large family size, this could impact on household demand for schooling.

The costs of education

The household's costs of education are of two types: direct and opportunity costs. The direct costs of education are the explicit costs such as school fees, books, uniforms, food at school, transport and extra classes a household incurs when it enrols a child in school. However, the other type of cost, opportunity cost, when used in economics refers to the alternative item forgone that the same amount of resource could have been used to attain (Begg, et. al., 1997). When applied in the field of education, the opportunity cost of schooling is the household's income or child's labour that the household loses when he or she attends school rather than undertaking productive economic activities. In general, total costs (direct and opportunity costs) of schooling is lowest for small children and increases as they advance in age, but at latter stage the opportunity cost is greater for girls than boys because girls are needed to take care of younger siblings and other household chores (Rolleston, 2009; Akyeampong, et. al, 2007; Bray and Bunly, 2005; Colclough, et. al, 2003; Al-Samarrai and Peasgood, 1998).

It is significant to note that the concept of opportunity cost is complex and difficult to estimate (Bray, 1996). The complexity of estimating the opportunity cost of schooling coupled with the absence of data in most developing countries, particularly in Africa have led studies that estimated the opportunity cost of schooling to employ proxies such as the opportunity wage of the child or cost of parents time as a measure of the opportunity cost of schooling to the household (Colclough, et. al., 2003; Mason and Rozelle, 1998; Tansel, 1997; Gertler and Glewwe, 1989). Unfortunately, using a proxy has produced conflicting results. For example in La Cote d'Ivoire, Tansel (1997) found statistically significant positive relationship between the opportunity wage of the child and demand for primary schooling, while in Ghana the relationship was negative but not statistically significant.

Wang (2001) as cited in Bray, et. al. (2004) identifies two types of opportunity costs that impact on the poor's demand for schooling (Cohn and Geske, 1990; Bray and Bunly, 2005). The first type of opportunity cost is the loss of income resulting from the child being enrolled in school. Since the child had to be at school or travel to and from school, it is not possible for the child to engage in other productive activities. This type of opportunity cost depends on the hours the child devotes to schooling, the labour market and the nature of home production (Bray, et. al., 2004; Colclough, et. al., 2003). For example, where a household engages in petty trading or requires child care, the opportunity cost of sending a child to school could be very high. Besides, as children get older, the value of their labour services increase and this is particularly relevant in poor rural areas, where menial work is a key factor of production in the subsistence economy. The second type of opportunity cost relates to household loss of satisfaction when they enrol a child in school – this comes about when household incurs expenditure on fees and other school related expenditures rather than on meeting household consumption needs or even for investment. The latter type of opportunity cost reflects the value households place on education when they choose to invest in human capital rather than in consumption or physical capital (Bray, et. al., 2004; Colclough, et. al, 2003; Glewwe and Patrinos, 1999)

Educational costs constitute well known barrier to access to basic education in low income countries. In Zambia and Uganda, studies indicate that before the introduction of fee-free education about one third of household expenditure went to education (Boyle, et al., 2002 cited in UNESCO, 2007:152). Studies in Ghana have shown that

direct and opportunity costs continue to prevent many children from going to school (Oduro, 2000; Boateng, 2005; GNECC, 2005). Some of the less well acknowledged costs barriers include cost of providing food, clothing (uniforms) and transport. Starting in the 1951, the government of Ghana has introduced policies that will make going to school less of a problem of cost to all households, but these policies have not ensured that all children go to and complete basic education. Even though the new government policy in 2005 sought to absorb 'full cost' through the introduction of the capitation grant and school feeding in some selected schools (World Bank, 2009), parents and guardians still incur considerable cost in sending their children to school (World Bank, 2009; Nishimura, et. al., 2006; GNECC, 2005; GSS,2000). Thus, direct subsidies to schools, in the form of capitation, have not made basic education free of costs to poor families in Ghana.

Studies have shown that school fees usually represent a small proportion of the overall household costs of sending a child to school. In Tanzania for example, a study revealed that school fees constituted only a fifth of total direct costs of primary schooling (Colclough, et. al., 2003; Mason and Khandker, 1997). Thus, there is the argument that increase in fees may have a relatively small impact on the total cost of sending a child to school (Colclough et al., 2003). This suggest that making basic education fee free, as it exists in Ghana today, may not necessarily induce demand for some households particularly among the poor due to a large non-discretionary expenditure including uniforms, books and food incurred by households. Even though direct and opportunity cost reinforce each other to produce the critical barrier for the poor access to schooling in rural areas (Bray and Bunly, 2005; Watkins, 2004), the impact of the direct cost could have a significant impact on household demand for education.

Occupation of household head
Analysis of the Ghana's GLSS data by Rolleston (2009) revealed that household heads who are formal public sectors workers were 5% to 12% more likely to enrol a child in school than household heads not in employment, while household heads employed in private formal sector of the economy were 3% to 11% more likely to enrol a child in school. This result is consistent with findings from earlier studies in Ghana which showed that the occupation of a household head affects the likelihood of a child being enrolled in school. For example, Lloyd and Gage-Brandon (1993) indicate that rural

children, both boys and girls whose parents are engaged in agriculture are disadvantaged in terms of access to schooling. Similar studies by Chao and Alper (1998) also found that household heads working in agricultural sectors are more likely to delay the enrolment of young children between ages 5-9 in school. Given that the main occupation of household heads in rural areas in Ghana is farming or fishing, this could impact on the demand for schooling.

Religion of household head

Even though in the United States, studies have found religion to significantly influence the demand and choice of schooling by households (Cohen-Zada, 2009; Long and Toma, 1988), studies in Africa that have examined the impact of religion on household demand for schooling appear to have produced inconsistent results (Colclough, et. al., 2003). Nevertheless, Moslem households tended to have lower demand for schooling than Christian households. In Ghana and Tanzania, Chao and Alper (1998) and Al-Samarrai and Peasgood (1998) respectively found that Moslem girls were more disadvantaged than boys in terms of access to education. Therefore, the religion of the household head could impact on the demand for education.

Distance to and from school

The distance a child had to travel from home to school and back influences household demand for schooling. This is because the further away the school is from the home the higher the cost household incurs when a child is enrolled in school, if all other factors are held constant (Colclough, et al, 2003). Even though in Tanzania, Al-Samarrai and Reilly (2000) found the impact of the distance on demand for primary schooling to be small and statistically insignificant, other studies have shown that when the travel distance to school is reduced, it increases the chances of children, in particular those in primary school to be enrolled in school (Colclough, et. al., 2003). For example, Chao and Alper (1998) found in Ghana that reducing the school distance by a mile to a primary school increases the likelihood of a child being sent to school by 1.4 percentage points. However, in spite of the massive investment into school buildings and infrastructure in basic education in Ghana (Rolleston, 2009; World Bank, 2004), in remote rural areas particularly those with dispersed settlements, the problem of distance to school could remain an important factor on the poor demand for schooling.

The quality of education

Quality is an attribute and its use in education is generally subject to socio-cultural valuation. Mitter and Schifer (1991): (cited in Bergamann, 1996) define quality education narrowly in terms of cognitive results. However, others (UNESCO, 2005; UNICEF, 2000) have focused on a number of dimensions of education that relate to the learners, their learning environments, contents, processes and outcomes. But these dimensions of quality may impact differently on households demand for education due to differences in social and cultural values. Bergamann (1996: 590) argues that:

> *certain dimensions of the quality of education influence the demand for education, although only aspects "visible" to the relevant actors come into play. Where they lack the professional criteria to assess output and process quality, they refer to simple output indicators, such as pass rates, and to efficiency indicators such as repetition, as proxies for output, or to the quality of the factors used in the process - school building, furniture, equipment, school books, teacher discipline and pupil behaviour, with the underlying assumption that input quality determines output quality.*

Therefore, different categories of actors in education (eg urban households /rural households, teachers) perceive quality education differently. For households in poor rural communities quality of education would be based on the information available to them about their schools (Bergamann, 1996). School quality influences attitudes of the poor towards demand and choice of education. In Ghana, the main reason that accounts for the growth of private schooling is the perception that they produce better examination and tests outcomes compared to public schools (MOESS, 2006; GSS, 2005a). Since some rural households have no education or very low education, their indices of quality would be based mainly on their observation of teacher and school pupil behaviour in the communities and the perception of schools' performance in examinations (Bergamann, 1996). However, many of the private schools that perform so well in examinations in Ghana are located in urban and peri urban areas and many are selective and high cost. Besides, the urban private schools have better trained teachers due to the attractive salaries they pay and also have good infrastructure and teaching learning materials. Therefore, the perception and reality of quality education may be quite aligned in the urban setting.

In contrast to the urban private schools, the LFPSs in rural areas pay relatively low salaries when compared to their public schools counterparts (Tooley and Dixon, 2007a). The LFPSs in rural Ghana do not have quality inputs such as trained teachers, adequate

teaching and learning materials and infrastructure when compared to public schools in similar environment. Besides, where LFPSs in rural areas are satellites of urban private schools, parents are unable to differentiate the results of the urban private school from the rural private school. Thus, the perception and reality may not be aligned like it is in the urban environment. As a result, the poor rural households' indices of quality education may differ from those in the urban settings - thus households that access the LFPSs may be feeding into a reality that is existing in urban environments and a promise of quality by the LFPSs. Perhaps with time, when poor households realise that is not the case, the market for the LFPS will change. Moreover, if LFP schools are unable to provide significantly better quality than public schools then their future may be uncertain.

Studies in the United States have shown, for example, that lower public school tests scores in elementary school increases the probability of parents choosing to send their children to private school (Lankford and Wyckoff, 1992). This is because the quality of schooling affects the child's labour market productivity, grade repetition and the cost of attaining a particular level of schooling. Since school quality is one of the measures of 'productivity' of education, improvement in the quality of basic education would result in positive returns to schooling and hence higher educational attainment (Mason and Rozelle, 1998).

Even though poor households might not make mathematical calculation of the costs and benefit of an educational investment, some households may undertake what Bray and Bunly (2005:84) term 'informal impressionistic analysis of the costs and the benefits' measured by quality and household expectation. For example, if households cannot perceive that the quality of education in their communities would enable their children to go beyond the threshold of education with which they can secure employment to recoup their investment, they may be reluctant to invest in education (Ibid). Studies in rural Ghana have shown that, the demand for basic schooling is influenced by parents' perception of the school's quality and their children's capacity to access post-basic education (Pryor and Ampiah, 2003; Lavy, 1996). Since the total costs of schooling for children in poor households in remote rural areas is more likely to be greater than those in peri- urban and urban areas (Bray and Bunly, 2005), if households perceive the

quality of schooling to be lower, they would have double reasons not to demand education.

Further, studies have established a positive relationship between quality of education and household demand for schooling. For example, Glewwe (1992) found that repairing classrooms improved cognitive achievement more than constructing more classrooms. Glewwe and Jacoby (1994) found in Ghana that improving the quality of school building results in higher test scores, while in Cote d'Ivoire, Montgomery, et al. (1995) found that improved availability of textbooks in the community primary schools led to significant improvement in educational attainment. Therefore, the availability of quality educational inputs such as adequate textbooks, trained and motivated teachers with strong commitment to teaching should significantly impact on poor household demand for schooling (World Bank, 2004; Chao and Alper, 1998). Reviews of research on the impact of school quality on performance based on over 100 studies in developing countries, found little evidence of teacher-pupil ratio or teacher salaries to be positively and significantly associated with student performance (Hunushek, 1995). However, the study found a significant positive association of teachers' education and school facilities with student performance. What the evidence suggests is that in developing countries spending on school facilities might play a significant role in improving student performance and hence the demand for schooling.

The quality of schooling could also be linked to teacher's regular school attendance and the contact time in the classroom. In Botswana, Dune, Leach et. al. (2005) found that the key factor for low performing schools is low professionalism of teachers in such schools- teacher absenteeism, lateness and refusal to teach even when the teachers are in school. Moreover, even though students are generally expected to be engaged in learning during the entire time they are in the classroom, time in the classroom, in reality is often not efficiently utilized due to poor teacher knowledge in the subject matter, inadequate teaching resources (Abadzi, 2009) and ineffective management of teachers (Alhassan and Adzali-Mensah, 2010; Akyeampong, et. al., 2007). In the Gambia and Burkina Fasso, Dia (2003) reports that scarcity of textbooks led teachers to spend considerable time writing lessons and problems on the board. Furthermore, contact time in the classroom means that students must be engaged in the prescribed curriculum while in class– as this is a better predictor of learning outcome than any

learning activity (Vocknell, 2006: cited in Abadzi, 2009: 274-276). In Ghana, the EARC (2003) report indicated that several teachers in rural schools did not follow the schools' prescribed teaching time table. Earlier studies in Ghana found instructional time lost due to teacher absenteeism and lateness to have resulted in students being taught only two out of ten subjects in a day (Fobi, et al,1999: cited in Akyeampong et. al., 2007). Time lost to teaching due to teacher absenteeism and lateness is a more common occurrence in rural than urban schools and could significantly shape household school choice decisions and demand for education. The quality of public and private schooling will be explored using some proxy indicators of quality such as training of teacher, pupil-teacher ratio, school infrastructure, exams and tests results.

2.8 Schooling decision of the poor – what are the key factors?

The decision by a poor household to enrol a child in school is based on a number of complex and interrelated individual, household and community factors. However, three key variables: benefits, costs and economic constraints feature prominently in the literature of household school choice decisions particularly in poor rural areas (Mason & Rozelle, 1998; Mason and Khandker, 1997; Sawada and Lukshin, 2001). This section examines these three factors and briefly discusses the salient factors that underpin household choice of private schooling.

Benefits of schooling

In deciding to enrol a child in school, households take into consideration the expected benefits. Given the relative scarcity of household economic resources, household would invest in education if they anticipate the benefits to exceed costs, given the constraints faced by the household (Becker, 1981; Psacharopolous and Woodhall, 1985; Shultz, 1988). In their study in Cambodia, Bray and Bunly (2005:3) noted that:

> *when households undertake informal cost-benefit analyses to decide whether or not to send a child to school, they are in effect balancing other priorities against education.*

 Evidence from developing countries indicates that the benefit of schooling especially at the secondary level is greater than at the basic level (Mason and Khandker, 1997; Mason and Rozelle, 1998). Earlier studies in Ghana found the benefits of primary schooling to be high relative to senior secondary (Canagarajah and Coulombe, 1997;

Psacharopoulos and Patrinos, 2002). However, recent studies by Palmer et. al. (2007) indicate higher private and social benefit of senior secondary schooling compared to primary schooling. The implication is that, school choice decision by the poor in rural Ghana would be influenced by perceived and real benefits of education and the ability of the children to access post- basic education (Pryor and Ampiah, 2003; Lavy, 1996).

Moreover, while the estimates of the benefits of schooling tend to capture the average returns to schooling, they fail to recognize the variations in expected returns at the local level. Rosenzweig (1995) indicates that the returns to schooling in agriculture are higher in environments where there is application of high technology compared to settings that rely on traditional farming methods (Mason and Rozelle, 1998). This suggests that when households rely on traditional agriculture for their livelihood, the motivation to enrol a child in school and choice of school type may not necessarily be related to the child returning to agriculture, but rather to other productive sectors such as public service and industry. Clearly, for the poor in rural areas, if fee-free education cannot be perceived to provide their children opportunities better than what their subsistence agricultural sector offers, they may decide not to enrol, or may choose a fee-paying option that they perceive to offer them value for their money. In a baseline report Ampiah (2007) found that in a predominantly poor rural Mfantseman district, households have occupational aspirations other than agriculture for their children. Since most rural communities in Ghana are engaged in subsistence agriculture, this would suggest that the benefits of education in an agricultural rural community would be relatively low. Consequently, this could impact significantly on these rural households' school choice decisions.

Costs of schooling

While the impact of cost on household demand for schooling has been discussed in detail earlier on in this chapter (see page 24), poor households' decision about whether or not to send a child to school, and whether to a public or a private school would be influenced by cost of schooling (Mason and Rozelle, 1998). The direct cost such as school fees, extra classes fees, food at school, uniforms and stationery increase as children progress to higher grades (GSS, 2000; Mason and Rozelle, 1998). Thus, poor households with two or more children in school may find the direct cost of schooling a

burden on the household. However, poor households desiring to enrol their children in private school, but unable to afford the cost for all of them, may choose to enrol in public and at least one child in private school (Glewwe and Patrinos, 1999). Even though the introduction of the capitation policy in Ghana in 2005 made public basic school fee 'free', other explicit direct costs such as feeding at school and uniforms continue to constitute a barrier to access to schooling to poor households (GSS, 2008: 29). Consequently, poor rural households that decide to enrol their children in school incur considerably high economic burden of educational expenditure relative to the non poor. In addition, households that choose to send their children to private school would incur other direct costs in addition to school fees. The implication is that poor households that choose private school over fee-free public basic school would incur a considerably higher economic burden of educational expenditure relative to their counterparts who enrol in public school. Since the poor households pay lower fees than households in higher income group, this might suggest that they receive lower quality education compared with the higher income groups (Mason and Rozelle, 1998). Clearly, in rural areas households among the higher income group may enrol in low-fee private school if they perceive the fee-free public school to be of inferior quality.

Moreover, the opportunity cost of schooling does influence household schooling decisions (Mason and Rozelle, 1998). In rural communities where the major economic activity is subsistence agriculture, the opportunity cost of schooling to households would relate to lost earning from child's labour in agriculture or in home productive activities (Bray, 1996). This type of cost increases with age and gender of the child. Older siblings are more likely to be made to work to support younger siblings, while girls are more likely to be made to take care of younger siblings or support parents in household chores than boys and so have lower opportunity costs (Mason and Rozelle, 1998; Sawada and Lockshin, 2001). Besides, understanding the nature of children's time, not just its value, but the alternative use of their time is significant to their schooling decisions-particularly when school activities (class time) clashes with major economic activity that is important to the household survival. For example, in the fishing rural communities in Ghana, it is not uncommon for children to absent themselves from school due to bumper fish harvest. Mason and Rozelle (1998) and Mason and Khandker (1997) have respectively noted that, in rural Java and Tanzania, the opportunity cost of schooling in both primary and secondary was significantly

higher than the direct cost of schooling and thus impacted strongly on household schooling decisions.

Economic constraints

Economic constraints such as lack of access to credit impact on households schooling decisions. In the presence of a perfect credit market the capacity to borrow exists for households. Thus, with easy access to credit the schooling decision can be easily reached. However, in the real world, lack of economic assets owned by poor rural households impose a barrier to access to credit as evidenced by a number of studies in developing countries (Harma, 2009). Glewwe (1991) notes that credit constraints can impede the poor from investing in education. Therefore, if household face significant borrowing constraints, their current level of income and assets would be crucial to their school choice decisions. In rural Java for instance, Mason and Rozelle (1998) indicate that, households allow older siblings to enter the labour market to generate income to support their younger but brighter siblings' education. Clearly, household are minimizing losses and maximizing their gains by investing in brighter children. While the above factors have examined household schooling decisions in general, the next section briefly discusses school choice in the developing country context and the factors that underpin private school choice.

2.9 Understanding school choice in a developing country context

The word 'choice' according to English Thesaurus Dictionary means option, alternative, selection or variety. However, when used in education – school choice, it connotes choice between schools. Goldhaber (1999) defines school choice as 'any policy that is designed to reduce the constraints that current school configuration place on schools and students' (pg. 16). Goldhaber was writing in the context of developed countries like the United States and United Kingdom where catchment area restriction prevented some households to access schools of their choice. Further, Goldhaber notes that school choice takes several forms including choice among public schools within a particular district, choice across districts and public-private school choice. But as Srivastava (2008b) notes, catchment area restriction does not apply in developing countries in Asia

and Africa as parents are free to choose any school within and across districts. Nevertheless, choice could still be constrained by other factors including distance and cost. Again, unlike in the US or Chile , for example, where increased school choice was the result of the provision of vouchers (Patrinos, et. al, 2009; Levin, 1991) to poor households, increased choice in developing countries resulted from increased private provision (Srivastava, 2008b). As result, to be able to understand the school choice environment in developing countries, particularly in poor areas of Africa, it needs to be examined within a distinct choice system.

Tooley (1997) makes a distinction between two types of school choice - choice within a state regulated and publicly funded schooling system and choice in the market where the state is not a monopoly supplier and funder of education. The school choice market in Ghana is characterised by growing range of private schools entirely self funded through tuition charges, often owned by a sole proprietor, and are operated and managed through a set of informal rules and regulations set by owner (s) of the school. In urban or peri-urban environments, households with economic resources have the leverage to enrol in a school of their choice. However, in a typical poor rural environment, this might not be the case for the majority of households due to poverty.

School choice has to do with affordability expressed in terms of the proportion of household income that is expended on education. Lewin (2007b) notes that household survey has shown that the poor usually allocate about 5 percent and rarely more than 10 percent of household expenditure to education of a single child in public secondary school. Therefore, if household educational expenditure per child goes beyond 10 percent of their income, this would have serious implications on household expenditure patterns. As a result, Harma (2008) argues that real school choice has to do with a household's ability to pay school fees and related expenses without cutting back on basic household needs such as food, medical care and other household essentials. Thus, the mere decision to enrol in a fee- paying private school does not connote real choice, especially if households have to spend significant proportion of their income on just one child (Harma, 2008). Therefore, when Tooley (2005; 2009) argues that the poor households are choosing low-fee private schools, this seems to be confusing the issue about school choice because the majority of the poor in rural settings still have no real choice. Nevertheless, the school choice environment relating to this thesis is analysed in

terms of Tooley's choice in the privatised market. As Carnoy (2000) observes, 'when choice is about privatisation, we need to know much more about how such an educational system would look like' (pg. 15). Therefore, this research explores how and why the poor exercise this choice and the factors which enable them do so.

2.9.1 What key factors shape private school choice?

Evidence in the school choice literature indicates that household school choice is based on certain priorities such as the quality measured by performance, convenience and safety , religious affiliations of schools and socio-economic background of parents (Goldring and Philips, 2008; Lankford and Wyckoff, 1992).

Kleitz, et. al. (2000) indicates that parents who choose schools often cited academic performance judged in terms of the number of pupils that pass a standardized test scores as their main priority. Other studies have also shown that households that placed priority on academic achievement were more likely to choose private schools because of their better performance in examinations and test scores (Kingdon, 1996; Jimenez, et. al., 1991; and Cox and Jimenez, 1991). Jimenez, et. al. (1991) after controlling for measureable school characteristics, found that private schools' ability to adopt better management practices including teacher supervision and accountability to parents was significant in improving performance. In the United States Coleman et. al. (1966, cited in Betts, 1999) found that, the most significant determinant of student performance was the family background, while the differences in school resources accounted little for differences in performance. However, other studies such as Fuller and Heyneman (1989) found that schools were more important in poor countries. Research in developing countries has revealed that households choosing private schooling often cite better performance of private schools in test scores and examinations (Tooley, 2009; 2005; Tooley and Dixon, 2007a; Kingdon, 1996).

Further, household choice of private schooling may be influenced by the safety and convenience of schools to their children. Where the location of a public school is far away from a child's home or where the school is considered by a household to be unsafe for children, they are more likely to enrol in the nearest and safe school even if such a choice would imposed heavy cost burden on the household. In developing countries, children in remote areas sometimes have to travel long distances to the

nearest public school. In China, Tooley (2009) indicates that households in remote areas prefer to enrol their children in private school because of the distance and danger of travelling to the nearest public school. In Ghana, Chao and Alper (1998) conclude that the absence of primary schools in some communities constitutes a barrier to access to schooling. Consequently, households would have no option but to enrol their children in the only available fee paying private school in their communities.

The socio-economic differences of household and household heads or parents impact on their school choice. Household income or assets which are normally proxy for household resources are also positively related to educational choice (Shneider, et. al., 1996). Higher income raises the household's capacity to afford the cost of private education. In the US, studies have shown that higher income households were more likely to enrol their children in private school compared with their low income households (Smrekar and Goldring, 1999; Schneider, et. al., 1996) because of the superior quality education private schools provide.

Similarly, in developing countries, high and middle class households with their relatively high income enrol their children in expensive private schools (Oketch and Ngware, 2010; Addae-Mensah, 2000). These are children mainly from better socio-economic background and therefore enter private school taking along their home advantage. However, in poor rural environment where majority of the households lack social and economic capital, private schools might not be adding that value or making much progress in students' achievements. In rural areas of Ghana, households that are relatively better off including those that have social network of friends and relatives that provide them with resources for education may enrol in fee paying private schools.

Studies have shown that parental education, household income and occupation are positively related to school choice (Goldring and Philips, 2008; Colclough, et. al., 2003). Parents or household heads with higher educational attainment levels tend to place more value on education and this is reflected in their interests and attitude shown in education. Besides, the level of educational attainment enables parents to seek relevant information about schools and thus able to make more informed decisions on educational choice (Goldring and Philips, 2008). Even though the literature on reasons for private school choice is based mainly on studies in developed countries, it

nevertheless also applies to developing countries. The next section discusses the conceptual framework of the thesis.

2.10 Household schooling decisions: toward a conceptual framework

Households' decision regarding whether or not to send a child to school and to a particular school type is influenced by the complex interaction of social, economic and cultural factors working through power relations within the household (Al-Samarrai and Peasgood, 1998). In the literature, household production function has been widely employed to provide explanation to households schooling decisions (Al-Samarrai and Peasgood, 1998; Tansel, 1997; Chernichovsky, 1985).

The household production function model assumes that, there is an optiomal level at which households equate costs to benefits. When households view education as an investment good then the demand for education will continue as long as marginal benefits are greater or equal to the marginal costs of schooling assuming no liquidity constraints. Households incur both direct and opportunity cost for the period the child is enrolled in school. If households perceive the opportunity costs as significant, the decision to access the type of provision does not become a simple straightforward matter – tradeoffs and perceived value become important considerations. The perception of the quality of education and the importance households attach to education may influence their choice decision. Where households cannot perceive education to be of any good value, they may decide not to enrol altogether. Again, the benefits of education to the household may be influenced by transfers they expect to receive from their children after completing school, this depends on their children's chances of finding a job (Al-Samarrai and Peasgood, 1998).

Further, while some households may be able to attain an optimal level of investment in education, others might be constrained by lack of resources including credit facilities with which the household can borrow to finance education. The extent to which the household would be constrained depend on a number of factors including the number of school going children in the household, education of the household head and the existence of social network. Besides, resource constraint in the household affects which child of a particular gender goes to school. For example being a first born child and also

a boy increase the chances of being sent to schools in the face of constraints (Harma, 2008). Changes in the earning in the households that favours mothers or aunts may strengthen their position in influencing who goes to school and to which type.

When a household views education as a consumption good, the decision to send a child to school will be based on the satisfaction educated children brings to it, which in turn will be related to the level of education of the household head or the child's parents. In addition, preference for boys and girls schooling is informed by social and cultural norms and tend to have different effects on children in terms of gender (Harma, 2008; Al-Samarrai and Peasgood, 1998)

Generally, it is expected that household school choice decisions will be made by either a parent or both. But earlier research in the USA has suggested that the decision to enrol, and where, resides with the household head (Becker, 1981). In the household production function it is assumed that household satisfaction is maximised and resource allocation decisions are efficiently made through the household head (Al-Samarrai and Peasgood, 1998). However, Haddad et al., (1994) examining evidence from both developed and developing countries argued that the household head is often not the sole decision maker, and that other members play an equally important role. Anthropological literature show that in West African countries including Ghana, household resources are not pooled as women and men do not make expenditure decisions jointly (Munachonga, 1988; Fapohunda, 1988: all cited in Hadad, et. al, 1994). In la Cote d'Ivoire, Hoddinott and Haddad (1995) found that household expenditure differed in accordance with the share of total household income earned by women.

In this case, households' resource allocation decisions are made based on bargaining among members and the stronger the bargaining power of a household member, the greater his or her influence over resource allocations. This means bargaining power depends on the individual characteristics of household members including the household head (Haddad, et al, 1994; Thomas, 1994). In effect, the question of enrolling ceases to be simply a decision resting with the household head, other household characteristics become important. Therefore, following Glick and Sahan (2000), this study is based on the household production function model and maintains the notion of

non-unified preferences and bargaining over resources within the household – this framework would be significant in the interpretations of results of the study.

2.11 Summary

The literature review has clearly identified the salient factors that shape poor household demand and choice of schooling. These are household income, costs of schooling, the quality of education and the socio-economic characteristics of households. Clearly, in poor rural environments, whether or not households would be induced to enrol their children in school and in a particular type of school depends on their social and economic characteristics and their perception of the value of education.

The review shows that the costs of education to the household remain a key barrier to access to both public and private schools. Nevertheless, the literature also indicates that some poor households are choosing LFPSs. Since school choice has to do affordability, this thesis would explore how the poor can afford to make that choice.

When the government of Ghana introduced capitation fee-free schooling in 2005, the expectation was that it will absorb the 'full cost'. However, evidence from the fee-free schooling policies have shown that it tends to leave out large proportion of non-discretionary expenditure such as food at school, school uniforms and stationery. As a result, poor households still incur considerable costs on education. Given that private school fees constitute a small percentage of household total direct costs of schooling (UNESCO, 2007; Mason and Khankher, 1997), if the poor perceives LFPSs to offer better quality, they might opt for private schooling. Thus, the costs of education and how it interacts with household school choice would be examined by this thesis.

Quality education is important to school choice because it is the differences in quality that make households look for alternative schooling. As demonstrated by the literature, there is evidence to suggest that the perception of quality drives interest in private schooling. However, in Ghana the evidence of better quality private schools performance is based on schools mainly in urban settings. As a result, the perception of private school quality is aligned with reality due to factors such as creaming of students and better school inputs. But much is still not known about the quality of LFPSs and public schools in poor rural areas. This will be explored later to establish whether

household choice of private schooling based on the perception of better quality is aligned with the reality and how that might influence schooling decisions of the poor.

Finally, in some developing countries such as Chile and Colombia school choice was promoted through the provision of vouchers (Patrinos, et. al., 2009). As a result, poor households that received vouchers were able to submit them to schools of their choice – thus providing poor households with a real choice. However, in a country like Ghana, there are no vouchers or grants with which the very poor households can access schools of their choice. Thus, when the poor households choose fee paying private school, it raises questions about how they explain their choices and what factors enable them to make that choice and pay for it. These factors will be explored in detail in chapters 6 to 8.

 The next chapter examines the factors impacting on access to basic education in Ghana using national data – the GLSS, EMIS and BECE examinations results.

Chapter 3: What factors impact on access to basic education in Ghana?

3.1 Introduction

This chapter examines the factors impacting on access to schooling in Ghana. It first examines the pattern and allocation of government expenditure to education. Second, the relationship between household income and educational expenditure of poor households in rural areas is explored to determine household affordability of schooling in the fee-free education context. Finally, educational inputs and outcomes measured by the Basic Education Certificate of Examination (BECE) results of public and private schools in 53 educationally deprived [8] districts of Ghana are examined for differences in performance. A summary of the chapter pulls together the significant factors that might impact on access to schooling in Ghana.

3.2 How does government education expenditure allocation impact access?

Access to education in many developing countries is disproportionately represented by children of middle and upper class families (Johnstone, 2001). In Ghana, Addae-Mensah (2000) indicated that over 70 percent or more of the students who enter universities in Ghana are from middle and upper income families. These are children whose parents have invested heavily in their education by enrolling them in expensive private schools and attend top secondary schools in the country. This clearly suggests that, if public resource is to be equitably distributed, a greater proportion of it would have to be allocated to the basic education sector where the majority of the poor are still struggling for access (Akyeamong, 2009).

There are certain norms that are supposed to guide and ensure equitable and efficient public resource allocation to education. UNESCO, for example, specifies that for equitable and efficient allocation of public resources to education, the proportion of a country's GDP allocated to education should be in the range of 4% and 6%, with less than 20% of this amount going to tertiary education (MOESS, 2008). Data from the Ghana Ministry of

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[8] There is a distinction between educationally deprived district and a deprived district. While the former is defined by the GES based on criteria including the percentage of children having desk, pupil-teacher ratio, percentage of teachers untrained, availability of potable water, building made from cement block, etc., the later is determined by the Ghana Statistical Service using household income, assets or expenditure. Therefore, educationally deprived districts in Ghana are also more likely to be deprived.

Education shows that public expenditure on education as a percentage of GDP in Ghana has been growing steadily – rising from 6.2% in 2003 to 9.1% in 2007 (Table 3.1). However, allocating a significant proportion of a country's GDP to education might be necessary but would not be sufficient to raise access for the poor, unless government's allocation to education targets poor and deprived areas of the country. Since in Ghana the cost of schooling is a barrier to the poor having access to basic schooling (Oduro, 2000; Chao and Alper, 1998), any allocation to the education sector skewed in favour of basic education of the poor is likely to result in fairer redistribution of public resources and hence create opportunities for poor households to access basic education. Unfortunately, government expenditure on education between 2003 - 2007 shows that spending was skewed in favour of tertiary and senior secondary education compared with basic education.

Table 3.1: Government recurrent expenditure on education in Ghana, 2003-2007 (Real 2005 Price)

Year	GDP	Total Education Expenditure	Education Expenditure as a % of GDP
2003	23,269,628.50	1,452,700.21	6.2
2004	27,675,960.90	2,028,525.06	7.3
2005	34,592,455.30	2,594,072.95	7.5
2006	40,969,550.02	3,348,157.31	8.2
2007	49,827,369.32	4,540,895.26	9.1

Source: Author's calculation is from data derived from MOESS, 2008.

Table 3.2 shows that government expenditure on tertiary education reached 21% of total education expenditure in 2004, declined marginally in 2005 and then rose to 22.5% in 2006 and 23% in 2007 - these percentage growth rates are more than the 20% less recommended by UNESCO. During the same period (2003-2007), allocation to primary education declined steadily from 40% in 2003 to 27.6% in 2006 (see Table 3.2). Public expenditure on pre-school also fluctuated over the period, averaging around 3.5% of total government spending on education, while expenditure on junior high school (JHS) also fluctuated but experienced steady decline starting from 2005 to 2007. This suggest that to be able to achieve education for all by 2015, government might have to re-examine its allocation within the education subsectors and priority given to basic education sector.

Table 3.2 shows the trend in government expenditure in education by level from 2003 to 2007. Even though government's expenditure to basic education in the form of

Table 3.2: Trend in government education expenditure by level, 2003-2007(Amount in Ghana Cedis)

SOURCES	2003		2004		2005		2006		2007	
	GH¢	%	GH¢	%	GH¢	%	GH¢	%	GH¢	%
Pre-School	*9,886,200*	*2*	*23,176,164*	*4*	*25,029,905*	*3.4*	*37,144,800*	*3.9*	*42,797,283*	*3.4*
Primary	*163,533,900*	*40.0*	*183,091,696*	***31.6***	*220,115,936*	***29.9***	*262,627,200*	***27.6***	*445,933,605*	***35.0***
JHS	*91,035,300*	*22*	*92,704,656*	*16.0*	*131,038,919*	*17.8*	*159,921,600*	*16.8*	*206,990,933*	*16.3*
SHS	63,024,400	15	115,301,416	19.9	153,124,131	20.8	150,382,800	15.8	160,788,917	12.6
TVET	4,531,200	1	6,373,445	1.1	8,834,084	1.2	8,599,900	0.9	8,236,942	0.6
SPED	1,647,700	0	2,317,616	0.4	2,944,695	0.4	3,835,600	0.4	3,894,322	0.3
NFED	3,707,300	1	9,270,466	1.6	13,987,300	1.9	6,736,900	0.7	5,709,015	0.4
Teacher Education	16,477,000	4	21,437,952	3.7	28,710,774	3.9	33,119,000	3.5	33,132,980	2.6
Tertiary	57,257,500	14	121,674,900	21.0	144,290,045	19.6	214,564,500	22.5	292,931,474	23
Management and Subvented	411,900	0	2,897,021	0.5	7,361,737	1	73,438,400	7.7	70,339,643	5.5
HIV-AIDS	411,900	0	1,158,808	0.2	736,174	0.1	2,474,300	0.3	2,784,370	0.2

Source: MOESS, 2008:115

capitation grants to schools in 2005 was intended to reduce the cost burden on the poor to enable them to access basic education, it appears that participation in private schooling among the poor has increased. The next section uses GLSS3 and GLSS5 to explore the participation of the poor households in public and private schooling, focusing on rural households.

3.3 What proportion of the poor in Ghana participates in private education?

Analysis of the Ghana Living Standard Survey (GLSS) data (GLSS3 in 1991/92) and (GLSS 5 in 2005) on household educational participation by school type and status of poverty shows that between 1991/92 and 1995/96 poor households in Ghana increased their participation in private schooling.

Table 3.3: School type attended by household poverty status – All Ghana /rural Ghana, 1991/2 (aged 6-17)

All Ghana	School Type			
	No School	Public	Private	Total
Poverty Status				
Extremely Poor	1042	1741	73	2856
%	36.48	60.96	2.56	100.00
Poor	328	742	39	1109
%	29.58	66.91	3.52	100.00
Non-Poor	651	1904	347	2902
%	22.43	65.61	11.96	100.00
Total	2021	4387	459	6867
%	29.43	63.89	6.68	100.00
Rural Ghana	No School	Public	Private	Total
Poverty Status				
Extremely Poor	915	1,473	39	2427
%	37.70	60.69	1.61	100.00
Poor	246	545	4	795
%	30.94	68.55	0.50	100.00
Non-Poor	356	962	74	1392
%	25.57	69.11	5.32	100.00
Total	1,517	2,980	117	4614
%	32.88	64.59	2.54	100.00

Source: Computed from GLSS 3

Table 3.3 shows that, of the total national representative sample of 4,614 rural households in 1991/92 only 2.54% choose private schooling compared to 64.59% public schooling. However, analysis of participation in terms of the household poverty status indicated that, of the 2,856 households that were extremely poor, 2.56% choose private schooling, with 60.96% choosing public schooling. Households that were classified as poor had 3.52% and 66.91% choosing private and public respectively. In rural Ghana,

the data shows that of the 4,614 sampled households only 2.54% compared to 6.68% nationwide choose private schooling. Evidently, a significant proportion (64.59%) of the households in rural Ghana chose public schooling.

Generally, it appears that poor households in 1991/92 - before the advent of education fee-free capitation policy in Ghana, preferred public to private schooling. However, the question is whether the fee-free education really succeeded in making public school a more preferred option for the poor. Table 3.4 shows household school participation in 2005/6.

Table 3.4: School type attended by household poverty status – All Ghana/rural Ghana 2005/6 (aged 6-17)

All Ghana	Schooling Type			
Poverty Status	No School	Public	Private	Total
Extremely Poor	1596	2563	223	4382
%	36.42	58.49	5.09	100.00
Poor	265	910	144	1319
%	20.09	68.99	10.92	100.00
Non-Poor	801	3660	1623	6084
%	13.17	60.16	26.68	100.00
Total	2662	7133	1990	11785
%	22.59	60.53	16.89	100.00
Rural Ghana	No School	Public	Private	Total
Poverty Status				
Extremely Poor	1519	2324	192	4035
%	37.65	57.60	4.76	100.0
Poor	232	743	113	1088
%	21.32	68.29	10.39	100.0
Non-Poor	454	1896	479	2829
%	16.05	67.02	16.93	100.0
Total	2205	4963	784	7592
%	27.73	62.41	9.86	100.0

Source: Computed from GLSS

The analysis of GLSS5 data shows that private school participation by poor households, especially those in rural Ghana experienced increases. Of the total sample of 11,785 poor households in Ghana, 16.89% and 60.53% enrolled in private and public schools respectively. Compared with the GLSS3 in 1991, data from GLSS5 shows about 10% increase in poor households' participation in private schooling. Again, private school participation in terms of the depth of poverty indicated that the extremely poor and poor households in Ghana also experienced increased private school participation, rising from 2.5% in 1991/92 to 5.09% in 2005/6 and 3.52% in 1991 to 10.92% in 2005

respectively for the extremely poor and poor households. In rural Ghana, similar patterns of participation were experienced – the poor household private school participation rose from 2.54% in 1991 to 9.86% in 2005, with extremely poor and poor rural households increasing their participation from 1.61% to 4.76% and 0.5% to 10.39% between 1991 and 2005 respectively.

The evidence demonstrates that poor households' participation in private schooling generally and in rural areas in particular increased over the two GLSS. This is an indication of the poor's interest in private schooling. This interest shown by the poor in private schooling needs to be taken seriously in order to find out why there is an increase. The other issue is, given the increase in private school participation by the poor, how can it be understood in line with the structure of household educational expenditure. This is analysed in the next section.

3.4 What is the structure of household education expenditure in Ghana?

Since the cost of education is one of the main barriers to access to schooling, particularly to the poor in Ghana (GNECC, 2005; Oduro, 2000; Chao and Alper, 1998), examination of the structure of household educational expenses would help identify key elements of cost in household educational expenditure. Table 3.5 shows the average household educational expenditure per child in 1998 and the percentages are of total educational expenditure. The data shows that at the primary level, expenditure on food, boarding and lodging at school remains most significant expenditure item to households - constituting 40.3% of household total expenditure per child in a primary school. In contrast, household expenses on food, boarding and lodging in Junior High and Senior High schools was second most important item constituting about a fifth of households' educational expenditure. It is important to note that in Ghana primary and JHS are normally not boarding, even though there are a few boarding schools mainly in the private sector. As a result, when the GLSS estimates put together boarding and lodging cost with food cost, it tends to obscure the actual contribution of food to the cost of education.

 The most significant expenditure item at the JHS and SHS levels was the school and registration fees, which constituted a significant proportion of household average schooling expenditure - 50.0% at JHS and 51.2% at SSS levels. Even though

expenditure on uniform and sports clothes represented just about 5% of household educational expenditure for JHS and SHS levels of schooling, it represented 10% of total schooling expenditure per child at the primary level. A possible explanation for this could be that, households have more children in primary schools than in JHS and SHS.

Clearly, expenditure on food, boarding and lodging and uniform as far back as 1998/99 were the most significant schooling expenditure items at the primary school level rather than school and registration fees. Thus, making public school fee-free still leaves the poor households with considerable cost burden of enrolling a child in primary school.

Table 3.5: Average amount cedis paid per person in basic school in the last 12 months by level of school

Item	Primary		Junior Secondary School (JSS)		Senior Secondary School (SSS)	
	Amount	%	Amount	%	Amount	%
School/Registration Fees	34,911	28.6	215,404	50.9	325	51.2
Contribution to PTA	1,819	1.5	5,805	1.4	5,750	0.9
Uniforms/Sports Clothes	12,482	10.2	20,362	4.8	20,970	3.3
Books/School Supplies	9,027	7.4	33,059	7.8	66,691	10.5
Transportation to/from School	4,973	4.1	21,253	5.0	38,642	6.1
Food/Board/Lodging at School	49,184	40.3	94,787	22.4	135,045	21.2
Other Expenses (Clubs, extra classes	7,564	6.2	21,032	5.0	27,473	4.3
Other in-kind expenses	2,046	1.7	11,220	2.7	15,393	2.4
Total	122,006	100	422,922	100	635,693	100

Source: GSS,2000 (GLSS4, 1998/99) Amount in 1998/99 Ghana Cedis.

Again, with a significant proportion of household expenditure on education (about 51%) devoted to school and registration fees at the JHS level, this could constitute a barrier to the poor's access to Junior high school which is an integral part of the basic education in Ghana.

It is important to note that in a typical private school in an urban setting, households' educational expenses will be different from the general pattern of educational expenses provided by GSS (2000). For example, Frimpong (2000) as cited by GSS (2005) indicated that in a typical urban private school, miscellaneous cost such as extra classes, food and transport to school was greater than the annual fees paid by parents, with little variation in the levels of total costs of schooling at different grades (see Table 3.6).

Table 3.6: Costs per child of a typical private basic school (Amount in 2000)

Class	Annual Basic Fees	Annual Miscellaneous Costs	Annual Total Cost	Annual Total Cost in 1999 constant prices
Primary 1	663,000	1,125,000	1,788,000	2,272,496
Primary 2	678,000	1,125,000	1,803,000	2,291,561
Primary 3	678,000	1,125,000	1,803,000	2,291,561
Primary 4	711,750	1,150,000	1,861,750	2,366,230
Primary 5	715, 500	1,150,000	1,865,500	2,370,996
Primary 6	715, 500	1,150,000	1,865,500	2,370,996
JSS 1	795,750	1,200,000	1,995,750	2,536,540
JSS 2	795,750	1,200,000	1,995,750	2,536,540
JSS 3	773,250	1,200,000	1,973,250	2,507,944

Source: Frimpong, 2000 cited by GSS, 2005. Average exchange rate = ¢4500 cedis to US$1

The level of fees paid in the urban private school shows that only rich households could afford the cost of such schools. A comparative analysis of the cost per child in the urban private school in 2000 and household educational expenditure per child by welfare quintile in 1999 prices (Table 3.7) indicate that, this type of urban private school is not for the poor. This is because even urban households in quintile 3 had their schooling expenditure per child (Gh¢ 635,001) representing just about a quarter of the cost per child in primary 1 in private school - only households in quintile 5 have their expenditure per child close to the range incurred in the private schools studied by Frimpong in 2000. However, this is not to say that only households in the highest income group access private schooling. This is because in urban, peri-urban and rural areas there are private schools that charge low fees and this has enabled some households in the lowest income group to patronise private schooling for their children.

Table 3.7: Expenditure on schooling by households according to welfare quintile and rural/urban location in 1999 Cedis (Accra level of purchasing power).

Quintiles of welfare	Locality		
	Rural	Urban	Total
1	150,601	186,798	153,188
2	287,599	505,713	327,803
3	420,777	635,001	485,014
4	671,884	963,851	850,193
5	1,139,361	1,567,532	1,491,615

Source: Author's calculation from GLSS 5

The GLSS data (GSS, 2005) show that, food, boarding and lodging and uniform were the main items of households' educational expenditure, which raises doubts about whether the elimination of school fees completely removes cost barriers to the poor's access to education. The analysis also suggests that, the poor that chose private schooling must be accessing low-fee private schools – almost all the households in the quintile groups, except the highest quintile groups, would not be able to afford high fee private school in an urban environment like Accra. It is significant to note that, this analysis of household educational expenditure is based on aggregated data that combines household educational expenditure in private and public schools. The sections that follow disaggregate households schooling expenses by school type and location using GLSS5 data to explore the schooling expenditure differences and what it means for the poor to access education.

3.4.1 Educational expenses by school type, level and location in Ghana

It is important to note that the GSS (2000) data on household educational expenditure is an aggregate of household educational expenditure of all school types irrespective of location (Table 3.5). Therefore, a more nuanced understanding of the structure of household educational expenses can be gained by disaggregating household schooling expenses by school type and location using the latest GLSS 5 data. Figure 3.1 shows total annual household educational expenditure per child in 2005 Ghana prices (GSS,GLSS 5, 2005). Since schooling expenditure was incurred in the period of fee-free public schooling, comparing rural public and private primary schools and JHS would be significant in explaining the variations in school cost of the various school types. For rural public primary school the mean total expenditure on schooling per child was about 200,000 cedis, while the public JHS had mean household educational expenditure slightly higher (about 300,000 cedis). The household educational expenditure had an interquartile range of 50,000-650,000 cedis for primary school compared to JHS which was 150- 800,000 cedis.

Figure 3.1: Total annual expenditure per child in school on schooling by school type(2005/6) (using probability weights) (in 2005/6 Cedis)
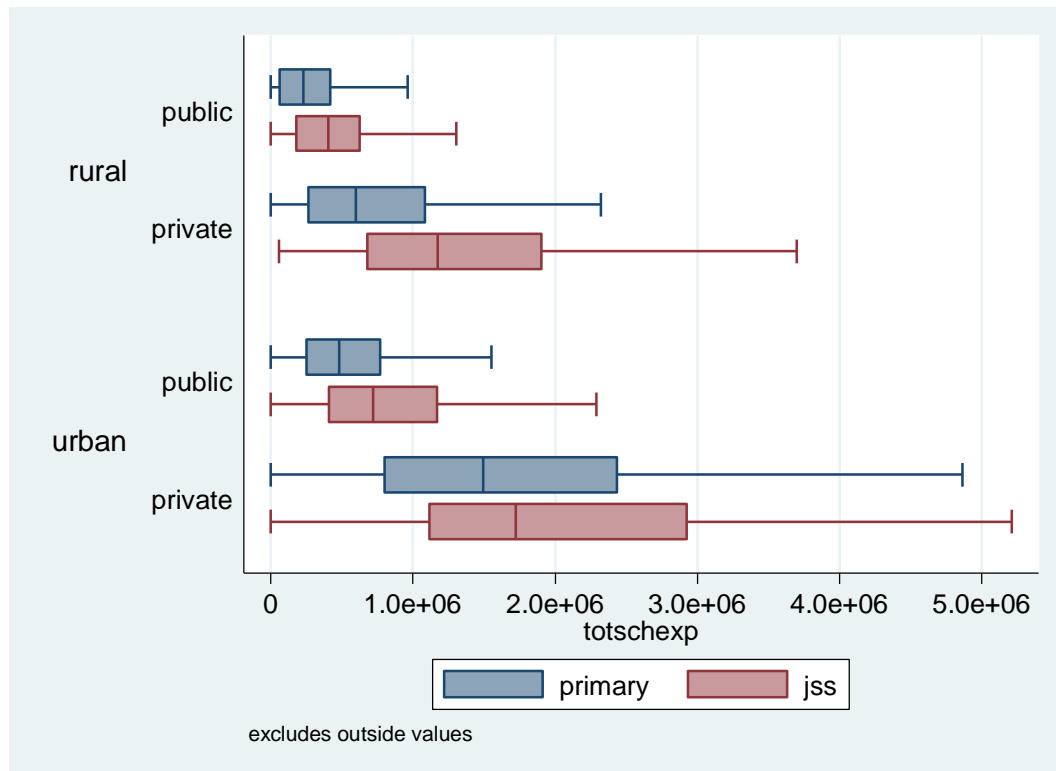
Source: Author's calculation from GLSS5.

In rural private primary and junior high school levels, however, the pattern of expenditure is different. The mean education expenditure (about 500,000 cedis) at the primary level in private school was greater than mean expenditure (about 190,000 cedis) at the public JHS. For private schools, the difference in educational expenditure between primary and junior high schools was much greater than in public schools as indicated by mean expenditure of about 1,200,000 cedis in private junior high school. Also, the interquartile range is larger than for public schools indicating greater variations in expenditure on private schooling. Rural households' educational expenditure in private school has an interquartile range of about 200,000 to 1,100,000 cedis at the primary level and 800,000 to 1,900,000 cedis at the junior high school level. Similar pattern of expenditure but at higher levels in urban public and private schools is observed. What might explain the big difference in educational expenditure between public and private schools could be the effect of the fee-free capitation policy which removed the payment of some school expenditure items such as parent teachers association dues, extra classes fee and examination fees. In addition, income could also be a major factor because spending on private education rise substantially with income. Figure 3.1 shows that, total education expenditure per child in a year in rural public

school ranged between 50,000 – 800,000 cedis compared to the rural private school which had total expenditure range per child of 200,000 – 1,900,000 cedis. This expenditure in rural private school on average is about twice the expenditure in public schools and has implications for affordability of schooling by poor households in rural areas.

To determine the poor households' affordability of the cost of private schooling, the proportion of income of households in the lowest income group expended on private education is estimated. Table 3.8 shows the mean annual household income by quintile of Ghana in 2005 prices. Comparative analysis of rural households' total expenditure per child in private education in relation to the income of households in quintile 1 shows that, the expenditure on a child in rural private primary (500,000 cedis) and junior high (1,200,000 cedis) schools constituted 6.9% and 16.5% of the income of households in the lowest income group in their respective levels of schooling – the interquartile range of expenditure of 50, 000-1,400,000 cedis at the primary school and 200,000-1,900,000 cedis for junior high school suggest that, the proportion of household income expended on private schooling would increase according to the fees charged and other payments required by a particular private school. Clearly, spending about 17% of the poor income on just one child in private JHS would constitute a great burden to the household.

Table 3.8: Mean annual household income by quintile group in Ghana in 2005.

Quintile	Mean annual household income (Amount in cedis)
I	7,280,000
II	10,200,000
III	10,980,000
IV	12,630,000
V	15,440,000

Source: GSS, 2008.

What the evidence suggests is that, for households in the lowest income group that decide to enrol in private school, a very high proportion of household income would be spent on schooling. Therefore, the question this raises is, when the poor access low-fee private schools, how are they able to afford the costs? This is explored in chapter eight of the thesis.

3.4.2 Household schooling expenditure per child by expenditure type

A disaggregation of households' schooling expenses by the type of expenditure would provide in-depth understanding of the contributions of the key household expenditure items to schooling expenditure and their likely impact on access to schooling. Figures 3.2 and 3.3 show household annual educational expenditure by item.

Figure 3.2: Annual expenditure per child in school on schooling by expenditure type (2005/6) primary (in 2005/6 Cedis)
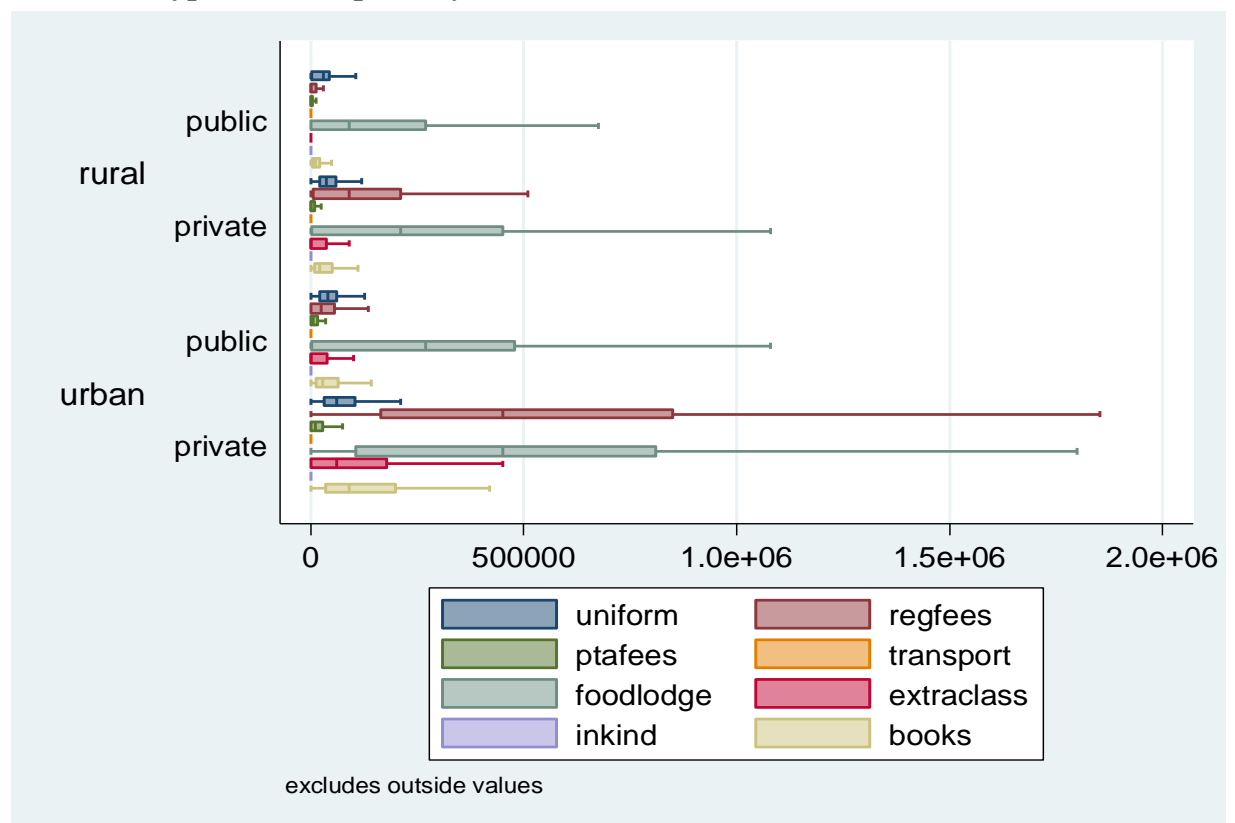
Source: Author's calculation from GLSS 5

Figure 3.2 shows that household expenditure on school uniform was relatively small (about 80,000 cedis at the mean) in both public and private rural primary schools compared to other expenditure items such as food, boarding and lodging and school and registration fees. The mean expenditure on food in public rural school was about 100,000 cedis but with an interquartile expenditure range of 0-700,000 annually. In the rural private primary school, however, food and registration fees were the major expenditure items. Even though the mean registration fee was about 100,000 cedis, household expense per child on registration at the interquartile range was 0 -250,000 cedis. Again, the mean expenditure on food in rural private primary school was about

200,000 cedis – this is about twice the expenditure per child in rural public primary schools. Since the interquartile range of expenditure on food per child falls between Gh¢ 0 - 490,000, it would suggests that for poor households providing the child with food at school could constitute a barrier to access to primary school. In urban schools, the pattern of schooling expenditure by item appears to be the same for both public and private schools, with registration and extra classes fees constituting the most significant expenditure items compared to other schooling expenditure items.

Analysis of household expenditure at the JHS level reveals that, whether in rural or urban or private or public, food and lodging constitutes most significant portion of household schooling expenditure, except registration fees in urban private schools which constituted the major educational expenditure (see Figure 3.3)

Figure 3.3: Annual expenditure per child in school on schooling by expenditure type (2005/6) Secondary (no probability weights) (in 2005/6 Cedis)
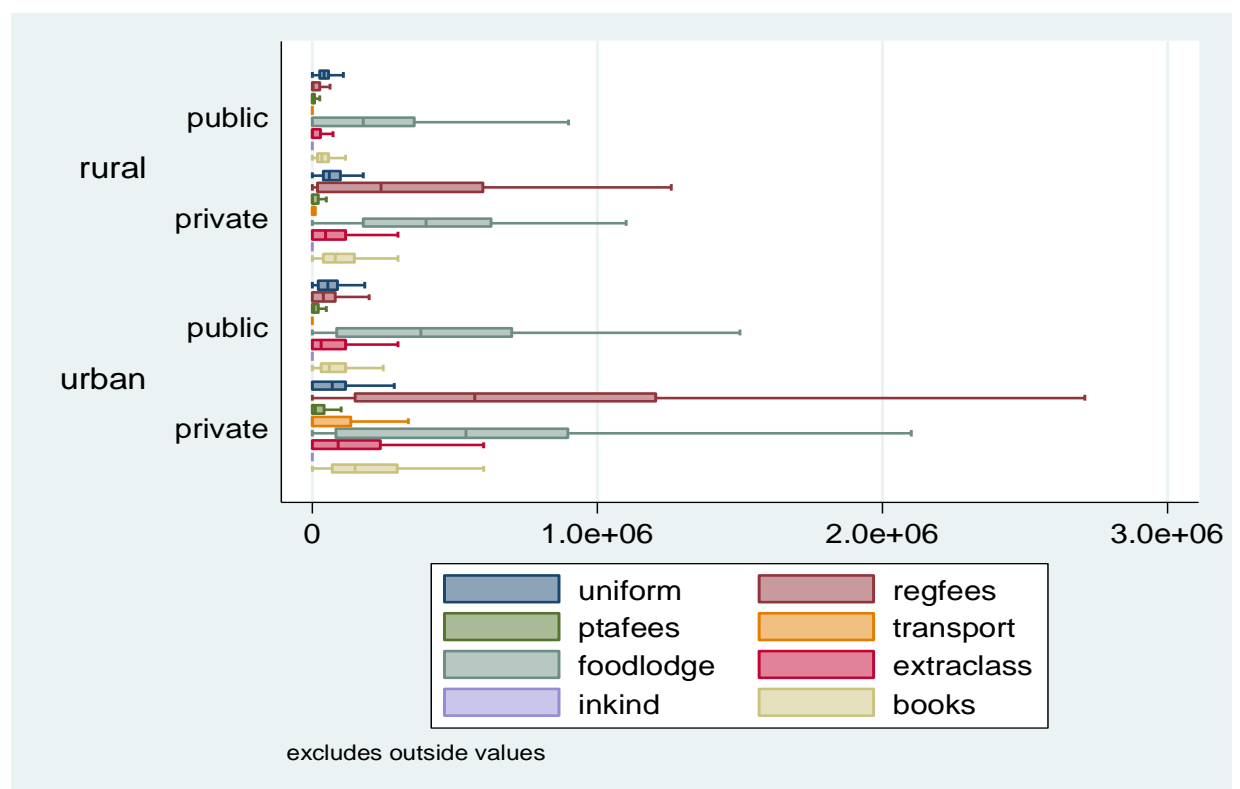
Source: Author's calculation from GLSS 5.

Household educational expenditure per child in urban private junior high school averaged about Gh¢ 600,000 annually, but the interquartile range of expenditure was

between Gh¢ 100,000 and 1,200,000. For rural private JHS, registration fee was second highest household expenditure after food, boarding and lodging.

In conclusion, the issue about schooling expenses is not simply about school fees. This is because if one looks at the structure of household educational expenditure per child, it is the food cost item that remains a key element of educational expenditure. Given that in public schools, the purchase of food in school is not obligatory, as it is in some private schools, this thesis would explore the effects of food cost on access to schooling.

3.5 Do educational inputs and outcomes vary by school type in educationally deprived districts?

Naturally it would be expected that the quality and quantity of inputs of a school relates to its outcomes. This section explores the assertion that low-fee private schools produce better outcomes in the form of exam results than public schools. The analysis begins by first examining the pupil teacher ratio and quality of training of teachers in the various school types. Second, the Basic Education Certificate of Examinations[9] (BECE) results of public and private schools in 53 educationally deprived[10] districts of Ghana from 2005-2008 is examined using descriptive statistics. Since language and numeracy are key goals of the basic education policy, a t- test is conducted to determine the difference in aggregate score and grade scores in English language and mathematics for public and private schools.

3.5.1 How do inputs in public and private deprived schools compare?

The number of pupils to a teacher in class is an important determinant of how much a child could benefit from teaching in school. Figure 3.4 shows that of the 53 educationally deprived districts 31 had pupil teacher ratio (PTR) beyond the norm set by the Ghana Education Service - 35 and 25 for primary and junior high schools respectively. Indeed, PTRs in private schools were generally within the GES norm of a manageable class size due to low enrolment in rural areas. However, in six of the

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[9] The BECE examination is conducted by the West African Examinations Council (WAEC)

[10] Educational deprivation is based on a number of criteria set by the Ghana Education Service in 2000. These include percentage of children having desk, pupil teacher ratio, percentage of teachers untrained, availability of potable water, building made from cement block, etc

educationally deprived districts the PTR private primary schools were far beyond the norm –ranging between 44 and 108 pupils per class. This has implications for the provision of quality education in such districts.

Figure 3.4: Pupil-teacher ratio of public and private schools in deprived districts, 2009.
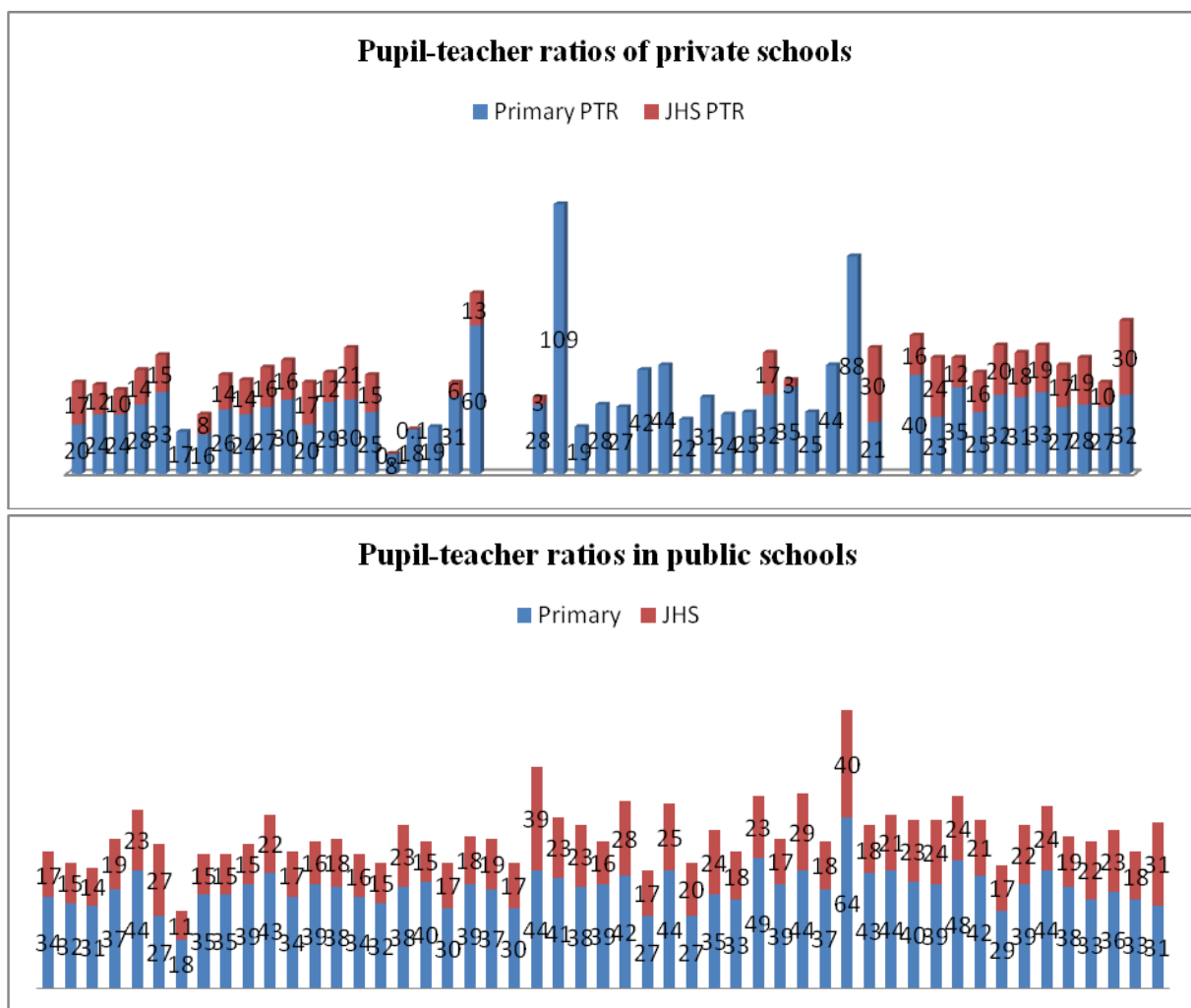
Source: MOESS (EMIS data), 2009

Another important indicator of quality of education is whether the teacher is professionally trained. Using the EMIS data on teachers in public and private schools in deprived districts in 2009, the quality of teachers is compared. Figure 3.5 shows the proportion of trained teachers to untrained in educationally deprived districts. Almost half of the teachers in public schools in educationally deprived districts were trained. However, of the 49 districts that had private schools, 18 had no trained teacher – only one district had 44% of its teachers trained, 2 districts had 20% trained and the

remaining districts had less than 20% trained teachers. Thus, even though public schools in the district had just about 50% trained teachers, private schools had only about 10% trained teachers.

Figure 3.5: Proportion of trained/untrained teachers in deprived districts, 2009
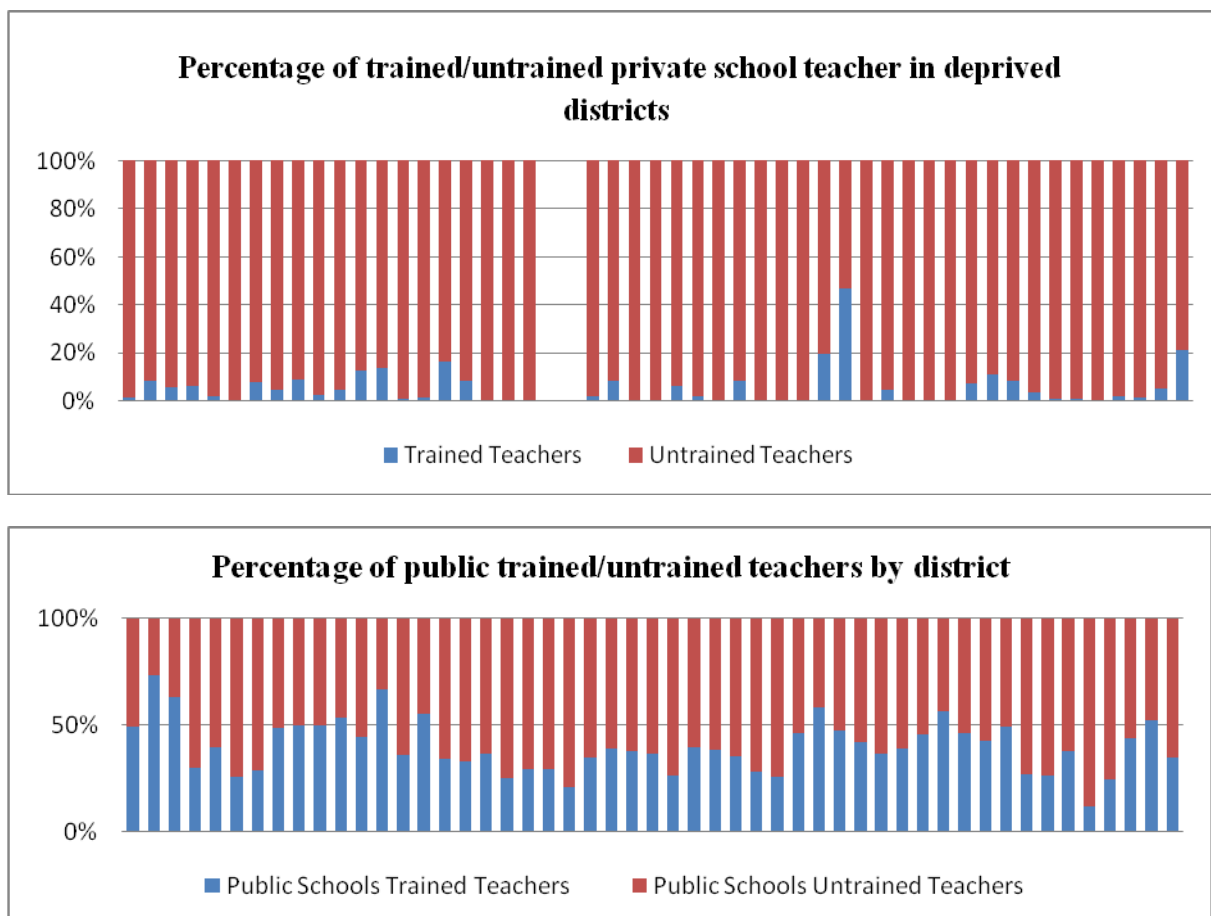
The EMIS coverage does not include unregistered private schools. However, it is not likely that, for example, unregistered low-fee private schools would have trained teachers because of the relatively low salary compared to the public sector. The implication is that low fee registered and unregistered private schools may end up having mainly untrained teachers.

In short, the analyses of inputs of public and private schools in the deprived districts clearly show that schooling inputs are generally inadequate in the various schools types. A significant proportion of teachers in public school (about 50%) are not trained. The picture of the quality of teachers in private is worse - as less than 10% of their teachers were trained. Apart from one district that had about 44% of teachers in private school trained, the rest of the district had about 10% trained or no trained teachers at all.

The PTR in some districts at the primary level was far beyond the stipulated enrolment norm of 35 pupils per teacher in primary in both public and private schools. Given that a significant proportion of teachers in both public (about 50%) and private (over 90%) are not trained, coupled with high pupil teacher ratios, the quality of education in these districted could be greatly affected.

There is the general perception that private schools do better in examinations than their public schools counterparts. For example, studies conducted in poor peri-urban area of Ga District of Ghana concluded that the private schools were doing better than public schools, in terms of examination results (Tooley and Dixon, 2007a). The next section examines this claim using BECE results of public and private schools in the educationally deprived schools in peri-urban districts of Ghana.

3.5.2 Do examination results of public and private schools compare?

This section analyzes the BECE examination results of public and private schools in educationally deprived districts from 2005 – 2008. The West African Examinations Council grades[11] each subject from 1 to 9. The lower the grade score the better the results. Total aggregate score for selection into post basic education is based on six best subjects out of a total of 10 including mathematics, English language and General Science. Therefore, the best results would have a lower aggregate of 6, while the worst will be aggregate 59.

The section begins with descriptive analysis - by comparing the means and standard deviations of aggregate scores, English Language and mathematics scores for the years under consideration in public and private schools to determine which school type as a whole is doing better in examinations. A bar graph showing the 10th percentile of results is used to deepen understanding of the differences in performance. Finally, two sample t-tests are conducted to determine whether statistically significant differences exist in the performance of public and private basic schools in the educationally deprived districts.

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[11] Grade 1 = excellent, Grade 2 = very good, Grade 3 = good, Grade 4 = fairly good, Grade 5 = fair, Grade 6 = credit, Grades 7 and 8 = pass, and Grade 9 is fail. Until 2010, the qualifying aggregate to post basic education was not exceeding aggregate 30 and must include a credit pass in Mathematics, English Language, General Science and Social Studies.

Descriptive analyses of BECE results, 2005-2008.

In order to have insight into the performance of public and private schools in the deprived districts, the mean aggregate score and the mean and modal grade for English language and Mathematics for the various school types were estimated. Table 3.10 shows the results.

Table 3.9: Mean and modal scores in BECE exams in educationally deprived schools.

Mean aggregate of BECE results of schools in deprived districts, 2005-2008

Year		Public			Private	
	N	Mean	Sd	N	Mean	Sd
2005	23,310	30.88	8.96	7,910	27.96	9.53
2006	51,748	31.55	9.30	10,653	25.57	10.30
2007*	10,512	31.54	9.09	2,984	26.84	10.00
2008	52,988	32.15	8.77	12,544	25.96	9.91

Mean grade in English Language in deprived schools, 2005-2008

Year	N	Mean	Sd	N	Mean	Sd
2005	23,034	5.60	1.59	7,820	5.00	1.58
2006	50,987	5.97	1.62	10,457	4.81	1.68
2007*	10,397	5.78	1.60	2,930	4.77	1.58
2008	52,579	6.02	1.59	12,419	4.83	1.73

Mean grade in Mathematics in deprived schools, 2005-2008

Year	N	Mean	Sd	N	Mean	Sd
2005	23,036	5.48	1.67	7,816	5.12	1.77
2006	50,830	5.48	1.82	10,438	4.58	1.81
2007	10,386	5.59	1.79	2,928	5.02	1.92
2008	52,571	5.59	1.67	12,421	4.86	1.84

Modal grade in BECE English Language of deprived schools , 2005-2008

Year	English Language	
	Public School	Private School
2005	5	5
2006	6	5
2007	5	5
2008	5	5

Modal grade in BECE Mathematics of deprived schools , 2005-2008

2005	5	5
2006	5	5
2007	5	5
2008	5	5

2007*= Many schools have their results cancelled because of exam malpractices.
Source: Author's calculation from WAEC BECE results, 2010

The mean aggregate results for the various school types between 2005-2008 shows that private schools did much better than public schools. Since the cut off point for qualification into post basic education in Ghana until the year 2010 was aggregate 30 – this invariably suggests that pupils from public basic schools on the average failed to meet the minimum aggregate score to transit to post basic education. However, the mean aggregate scores were examined in relation to their standard deviations for the various years in order understand how aggregate performance in public and private falls above and below their mean aggregates. The results suggest that children from private schools stood a better chance of accessing post basic education than those from public schools, all other things being equal[12]. Since the number of public schools represents about five times the number of private schools in the educationally deprived districts, this might be indicative that private schools are catering for the richest 20%.

Since reading, writing and numeracy are the key goals of the basic education policy, the mean grade scores in English language and Mathematics are also compared. On the whole, the mean grade in English in public schools was 6 compared to grade 5 in private schools. Even though the mean grade in English language in private schools is the same as their modal score (grade 5), public schools also had a modal score in English language of grade 5 throughout the period under consideration except in 2006 where it rose to grade 6 as indicated in Table 3.9 This suggests that in terms of performance in English language, most pupils in both public and private schools had the same modal grade score of 5. Since candidates are expected to at least score a credit in English language and mathematics to qualify to access post-basic education, these scores indicates that both public and private schools have almost the same chances of satisfying this requirement to access post-basic education.

With regards to mathematics performance, the mean grade score in public schools in 2005 and 2006 was 5 in the respective years, while in 2007 and 2008 the mean grade was 6 respectively, compared to the private schools that had grade 5 throughout 2005 to 2008. The modal score in mathematics for the two school types indicate that, from 2005-2008 most pupils scored grade 5 in mathematics in both public and private schools

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[12] If it is assumed that pupils scoring aggregate 30 or less have passed their English language, Mathematics and General Science subjects with at least grade 6.

(see table 3.9). Considering the fact that the schools in peri-urban areas are high cost private schools, this result is quite surprising.

Comparative analyses of public and private schools' BECE results using percentile estimates provided further insights into the examination performance of the two school types. Figure 3.6 shows that 10% of public school candidates scored aggregate 20 or less in 2005, 2006 and 2007. However, in 2008 the aggregate rose to 23. Compared with public school, 10% or less of the candidates in private schools had aggregate 16 or less in 2005, aggregate 13 or less in 2006 , aggregate 15 or less in 2007 and aggregate 14 or less in 2008. Therefore in terms of overall performance of the 10th percentile of the candidates, private schools performed better than public schools. This is really not

Figure 3.6: Tenth percentile of BECE results, 2005-2008
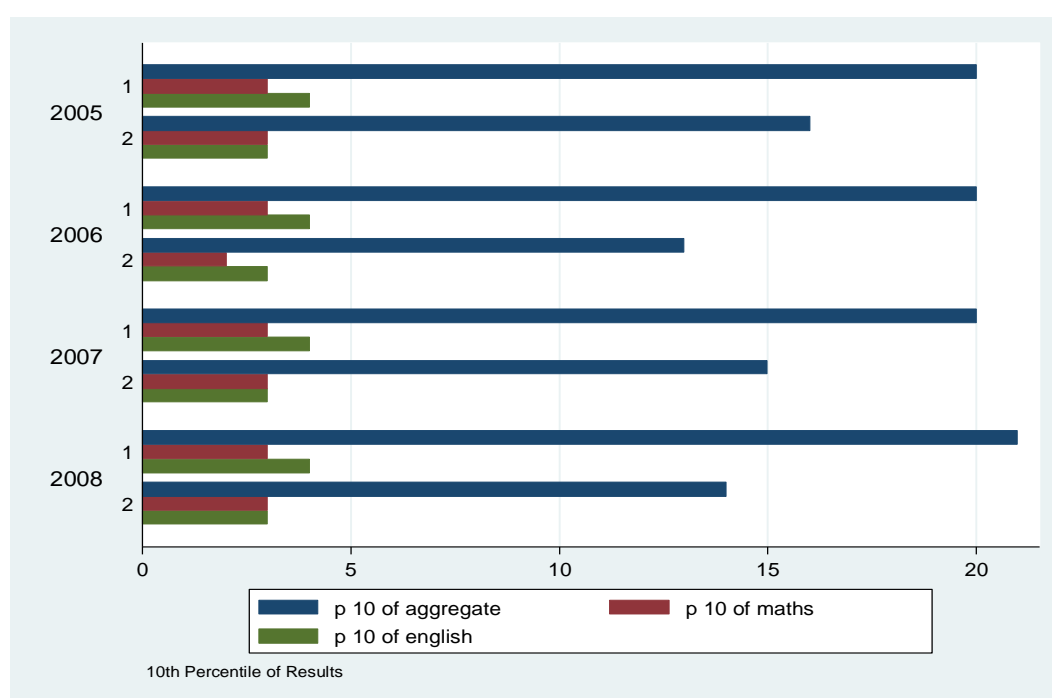
NB: 1=Public, 2= Private

surprising given that the private schools in peri-urban environment are high cost and selective. Mathematics results indicate that 10% of candidates in both public and private school had grade 3 or less throughout the years, except in 2006 when private schools improved to grade 2 or less. However, private schools did better in English language than public schools – 10% of private school candidates had grade 3 or less in English compared to grade 4 or less by public schools throughout the period. Clearly, while

there is a big difference in public and private schools' mean aggregate score, their percentile and modal scores in English language and mathematics did not show that big difference. This marginal but better performance by private schools might be an indication that private schools are not performing that better in English language and mathematics than their public school counterparts in similar peri urban environments.

Generally, the descriptive evidence has shown that, on the average private schools' grade scores were better than public schools. However, there was not much difference in their modal scores in mathematics and English language, suggesting that both public and private school have a better chance of meeting the basic requirement of a credit pass in two of the core subjects. The evidence also suggests that the top 10 percent of candidates in private schools performed better in the BECE than their counterparts in public school. This is actually not surprising given that these are mainly selective high cost private schools. However, in spite of what has emerged from the descriptive analyses, it is does not show whether or not the difference exam results between private and public school is statistically significant. The next section present this analysis.

3.5.3 Is there a statistical significant difference in BECE results of basic schools in the educationally deprived districts?

The descriptive analyses so far have demonstrated that the private schools have better results than public schools. However, it is not clear whether the difference in performance in examinations in public and private is statistically significant. Therefore, a two sample t-test of difference in aggregate examination results of schools in educationally deprived district of Ghana from 2005-2008 was conducted. In addition, two sample t-tests of differences in English language and mathematic results were also conducted. Table 3.15 shows the t-test results of aggregate BECE results. The results reject the hypothesis of no difference in examination performance, indicating that nationally private schools in educationally deprived districts perform better than their public schools counterparts in the BECE. Public schools candidates that wrote the BECE examination had a mean aggregate of 31.66, compared with the mean aggregate of 26.38 for private school candidates.

Table 3.10: : Two sample t-tests comparing aggregate BECE results of public and private schools in educationally deprived districts, 2005-2008

School type	N	Mean	Std. Err.	Std. Dev.	[95% Conf. Interval]	
Public	138558	31.66	0.02	9.04	31.62202	31.71725
Private	34091	26.38	0.05	10.00	26.27779	26.49021
combined	172649	30.62	0.02	9.47	30.58124	30.67065
diff		5.28	0.05		5.176132	5.39513

diff = mean(1) - mean(2)   t = 94.6103

Ho: diff = 0   df= 172647

Ha: diff < 0   Ha: diff != 0   Ha: diff > 0

Pr(T < t) = 1.0000   Pr(|T| > |t|) = 0.0000   Pr(T > t) = 0.0000

Further, t-test analyses comparing public and private schools' BECE results in English language and Mathematics for each separate year in the period under consideration (2005 to 2008) also rejected the hypothesis of no significant difference in their performance (see Appendix 1).

The evidence from the t-test results indicates that the mean difference of 5 in terms of aggregate performance between public and private is statistically significant. What might account for these results could be due to selectivity in student admission, in-school support strategies such as the provision of extra teaching or tuition and school level quality inputs in private schools. These strategies will be explored in-depth in three rural communities selected for this study. Again, analysis of English Language results indicate that private schools' mean score was significantly better than public schools, but the modal grade scores in English Language for pupils in both public and private schools were the same (Grade 5). Therefore, in spite of the private schools' superior means score in the BECE, both public and private schools scored grade 5 in English language.

One major criticism of this national data on BECE results from educationally deprived districts is that it does not present the typical examination results of schools in rural areas. This is because the data includes high cost peri-urban private schools in deprived districts and rural schools. Therefore, the data does not present the true picture of a typical poor rural environment. The evidence from this analysis is, however, consistent with Tooley and Dixon's (2007a) findings in peri-urban Ga Wes district of Ghana which is very atypical of Ghana. However, what is not known is how examination performance compares in a typical rural setting. As a result, this thesis examines the

BECE results and tests performance of public and low-fee private schools in a typical poor rural environment.

3.6 Summary

A number of factors impact on the poor's access to schooling in Ghana. The analyses show that even though government expenditure on education as a proportion of its GDP in real 2005 prices has been increasing from 2003 to 2007, allocation of expenditure within the education sub sectors does not go to basic education where the majority of the poor children in Ghana are still struggling for access. This is because a significant proportion of the education budget is allocated to the tertiary and secondary education relative to basic education. This has implications for quality provision at the basic education level.

National data shows that between GLSS3 and GLSS5 private school participation in Ghana increased. For poor households in rural areas, this increase represented about 10%. Therefore, there is the need to understand from the perspective of the poor what factors have been influencing this interest and growing participation.

Costs of education continue to pose a barrier to access by the poor households and with about 16% of the poor household income spent on just one child in private JHS, this could have implications for household expenditure patterns and affordability. In public schools, government has absorbed the 'full direct cost' through fee-free policy, but food cost remains an important issue to the poor in both public and private schools. Given that the purchase of food in public schools is not obligatory, it is quite interesting to find that the cost of food remains the most significant cost item of household educational expenditure. Therefore, this thesis explores the significance of food cost to access and choice of schooling in poor rural areas.

Input indicators of schools in educationally deprived districts show that public schools have better and more inputs than private schools. However, analysis of the BECE results of schools in educationally deprived districts show that, the private schools get better exam results than public schools given their intake of pupils. These are results derived from data on schools in peri-urban districts that have high cost private schools.

The literature on school quality in Ghana clearly shows that, private schools' exam and test scores have consistently been better than public schools. But this evidence is derived from private schools that are in the urban and peri-urban districts. These private schools attract the best candidates generally from better socio-economic backgrounds – these are children from households who apart from their capacity to afford the cost of schooling, also show great interest and do provide personal support in their children's schooling. Therefore, the perception of quality and reality are quite aligned.

What is not known is whether in a typical poor rural environment where the majority of the parents have never enrolled in school, the perception of quality private schools compared to public would be borne by the reality. This issue is explored later in Chapter seven. The next chapter discusses the methodology and methods of the study.

Chapter 4: Methodology and methods

4.1 Introduction

The issue of school choice for poor rural households and its interaction with cost and quality appears to have gained considerable research attention recently, as demonstrated by the literature. However, as noted earlier – with a few exceptions, e.g. Harma (2008) – most studies concerned with the choice between public and private schooling have been carried out in urban and peri-urban settings, using either quantitative or qualitative research approaches or both (Srivastava, 2006; Tooley, 2005; Kingdon, 1996).

This thesis employs a mixed methods approach in which qualitative information is nested in quantitative data collection and analyses. The chapter begins with the philosophical and methodological stance of the study. This is followed by discussion of my identity as a researcher. The discussion proceeds with the sampling procedures, the research process, and methods of data collection and analyses. It then discusses how ethical issues were confronted in the field. Finally, a summary of the philosophical and methodological issues is provided.

4.2 Philosophical and methodological stance: the rationale for a mix methods approach

Mixed methods research is increasingly being employed as an alternative to the traditional mono-method – quantitative or qualitative (Jang et al., 2008; Brewer and Hunter, 2006; Creswell, 1994); although some commentators have questioned the paradigmatic integrity of mixed methods research design (Guba and Lincoln, 1989; Smith, 1983). The paradigm debate, which centres on the conflict between the competing scientific worldviews of positivism and constructivism on philosophical and methodological issues, is well known (Tashakkori and Teddlie, 2003; Howe, 1988). For example, Guba and Lincoln (1989), and Smith (1983) argue that knowledge claims cannot be mixed due to fundamental differences in paradigms, and incompatible assumptions about the world and human nature. However, researchers including Brewer and Hunter (2006), and Tashakkori and Teddlie (2003) argue that the paradigm debate has been over emphasised, thus making dialogue less productive. Consequently, some

researchers have suggested that these philosophical differences may be reconciled through a new guiding paradigm: pragmatism, which embraces and promotes the mixing of methods (Jang et al., 2008; Morgan, 2007; Johnson et al., 2007; Tashakkori and Teddlie, 2003; Greene and Caracelli, 2003; Howe, 1988).

Therefore, pragmatists focus on the research problem rather than the research method, stressing that epistemological issues exist in a continuum rather than at two opposing poles as argued by positivists and constructivists (Teddlie and Tashakkori, 2009; Creswell, 2007; Cherryholmes, 1992). This is because at some point in the research process, direct interaction between the researcher and the participants might not be desirable; while, at other times, a highly interactive relationship could be required in order to construct knowledge relating to a complex research question. Thus, pragmatic epistemology recognises both the objective and subjective relationships that exist between the knower and the known, and addresses these differences using pluralistic data sources and interpretation phases of knowledge generation in the analysis (Teddlie and Tashakkori, 2009).

Ontologically, pragmatists, like critical realists, recognise that reality is independent of human consciousness (Teddlie and Tashakkori, 2009; 1998; Cherryholmes, 1992); but at the same time, they agree that there are locally co-constructed realities that emanate from human intellect, and which change as those involved in the 'construction' change (Teddlie and Tashakkori, 2009; Creswell, 2003). Pragmatists are sceptical of the positivist claim that truth about reality can be determined – because to the pragmatist, truth is what works at the time but is not based on the dualism of the mind or on reality independent of the mind (Teddlie and Tashakkori, 2009; Creswell, 2003; Cherryholmes, 1992). The present thesis employs both quantitative and qualitative data to provide a better understanding of the research problem – the factors that make low-fee private schools accessible to the poor in rural areas.

By employing pragmatists' epistemology and ontology, I have not privileged any one type of relationship between the researcher and the participant – objective or subjective reality; but rather, draw on assumptions underlying both positivism and constructivism. As a result, this study has been designed to employ mixed methods whereby any claim to knowledge is underpinned by pragmatic epistemology and ontology. The selection of

mixed methods for the study is most suitable as it allows the researcher to focus on the research problem, and then employ pluralistic methods of data collection and analysis to generate knowledge about the problem.

The concurrent nested mixed methods procedure (see Figure 4.1) was adopted for this study because it involves converging quantitative and qualitative data such that they are able to provide an in-depth and comprehensive understanding of issues surrounding the response of poor households to fee-free public education and the growth of low-fee

Figure 4.1: Concurrent nested strategy
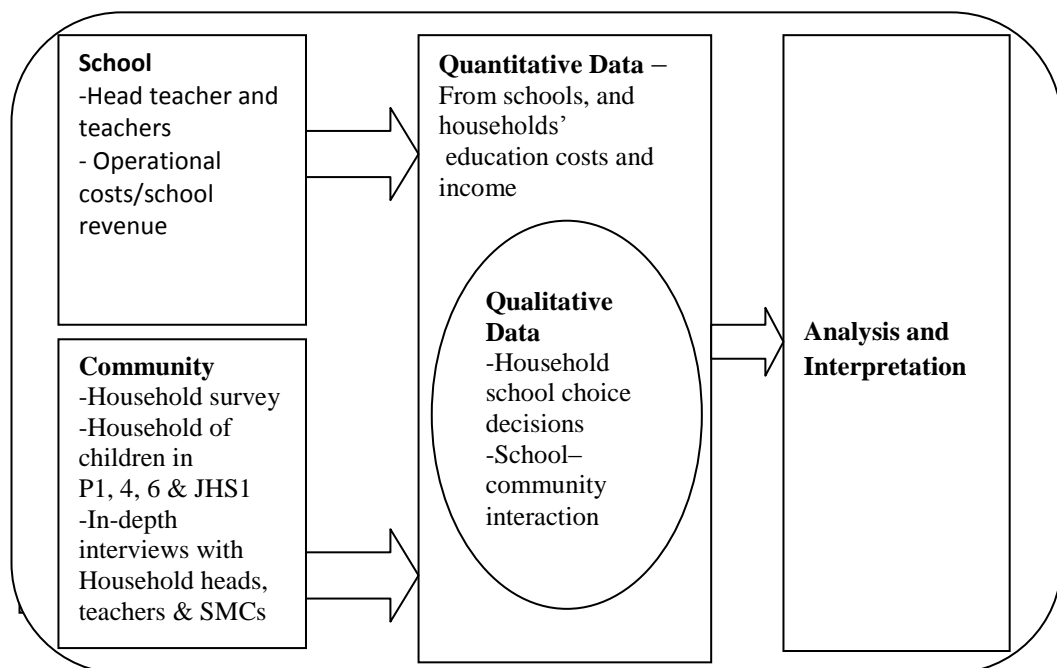
Source: Adapted from Creswell (2003: 214).

private schools in rural Ghana. However, unlike the use of triangulation, the concurrent nested strategy utilises a predominant method and in this study, the quantitative method dominates and complemented by the qualitative aspect (Creswell, 2003).

Given that the concurrent nested mixed methods strategy combines quantitative and qualitative approaches to data collection, analysis and interpretation, the researcher is able to statistically establish reliable and valid results in terms of households' schooling choice and expenditure from a pre-determined hypothesis such as school choice of the poor is not affected by socio-economic conditions. At the same time, it is possible to

gain a deeper understanding of school choice decisions and survival strategies through in-depth interviews with household heads whose children are in both public and low-fee private schools. Therefore, the study was able to produce results that were more valid and reliable than would have been the case if a mono-method epistemological and ontological position had been assumed.

In the course of the interviews, participants in the study were given the opportunity to voice their opinions on household investment and exercise of school choice. Given the subjective understanding of the value households placed on education, and their variation in choice and attitude to schooling, the study gave greater importance to the meaning of participants' lived experiences, social interactions, and processes through which attitudes and the exercise of school choice decisions were constructed (Marshall and Rossman, 1999; Powell, 1997). Interpretive schemes led to the understanding of human nature, which was achieved through the use of 'double hermeneutics' whereby the researcher and the researched became interpreters (Scott and Usher, 1996; Bryman, 1988).

The qualitative aspect of the study employed a subjective/interpretive approach in order to gain a contextualised understanding of school choice decisions, the practices of low-fee private schools, and the interaction between parents and teachers in the various types of school. Such contextualised knowledge of what informs school choice in the community; the nature of the interaction between school and parents; practices in low-fee private schools; and the processes by which household decisions are reached with regard to enrolling children in a public school, low-fee private, or both, is required to reach an understanding of the factors that make low-fee private schools accessible to the poor in rural communities.

4.3 Confronting my identity as a researcher in the field

I have lived all my life in an urban setting and therefore my presence in a typical Ghanaian rural community immediately placed me in the position of an outsider. However, my experience working in the research area for CREATE project in 2006/07 provided me with insider status, as I was already familiar with the conditions of some

households and knew some people in the communities who would become key informants.

I have also lived all my life amongst the Fante, studied their history at school, and am fluent in the language. My considerable understanding of Fante tradition and culture took on considerable significance in negotiation for access to the communities, as I was able to observe customary greetings and mode of communication with village elders and carefully ensured that my behaviour conformed to cultural and traditional values.

During data collection, I was very much aware of my insider and outsider position, and ensured that it had no influence on my perception and understanding of participants' views by engaging in constant reflexivity on my own position in the research process. For example, I entered the field bearing in mind the general perception that rural dwellers place less value on education, and ensured that I was constantly reminded of my own biases and assumptions.

Additionally, I have always taken it for granted that if rural households were poor and education costs constituted a burden to them, then, naturally, making schooling fee free would enable them to send all their children to school. On the contrary, my interaction with the study communities revealed that poor households' schooling decisions were determined by complex thought processes, suggesting that mere fee-free education, and quantification of costs and benefits would still leave the question of schooling decisions unanswered.

My interaction with parents and teachers in the study communities suggests that the critical realist stance which emphasises that social phenomena exist in the objective world and can be known probabilistically (Guba and Lincoln, 2005) was not appropriate for determining the reality. Rather, I became convinced that understanding household schooling decisions and choices required gathering all the relevant data by focusing on the research problem and then combining all this information to address it (Jang et al., 2008).

4.4 Sampling: finding households to study

The sample for this study was selected from two of the eight education circuits[13] in Mfantseman district in southern Ghana. These circuits were Narkwa and Dominase, which are among the poorest in the district (GSS, 2007; MDA, 2006). The selection of study sites was made strategically, one community being located in a coastal area, while the other two were situated in forest areas; therefore, together, they were quite representative of activities both on the coast and in the forest. Figure 4.2 is a map of Mfantseman district indicating the study locations.

Figure 4.2: Map of Mfantseman district
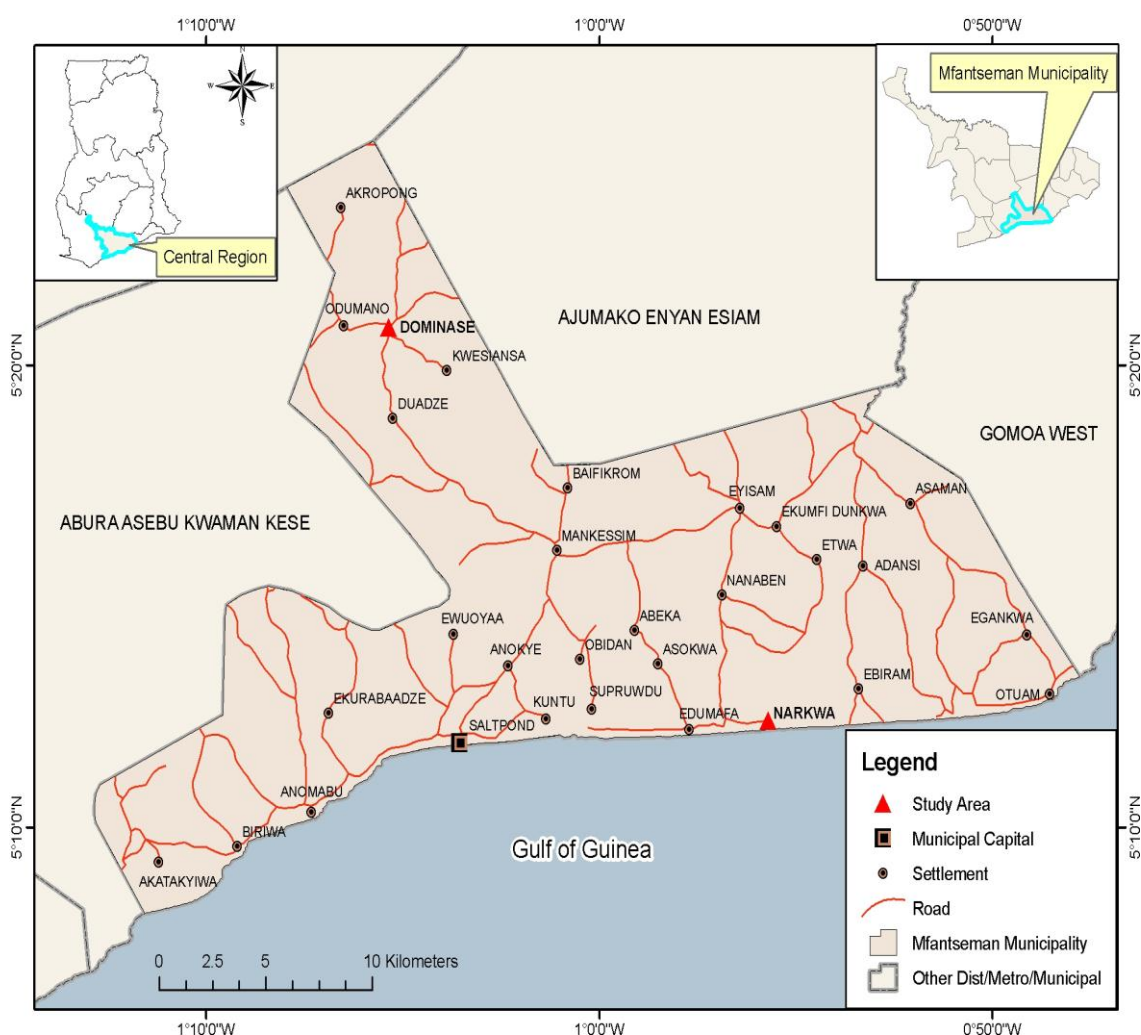
Source: MDA, 2006

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[13] Educational circuits are geographic areas in a district named for administrative purposes.

The selection of education circuits was followed by the identification of communities in them to be studied. The criteria for the selection of communities were firstly influenced by the fact that they were research sites for the CREATE project. According to Ampiah (2007), the criteria for selecting CREATE research sites were based on accessibility to communities, their relatively high economic deprivation, and whether they exhibited occupational activities that had the potential to impede children's access to schooling. Figure 4.3 shows the relative locations of the communities and schools[14] under study.

Figure: 4.3: Relative locations of communities and schools
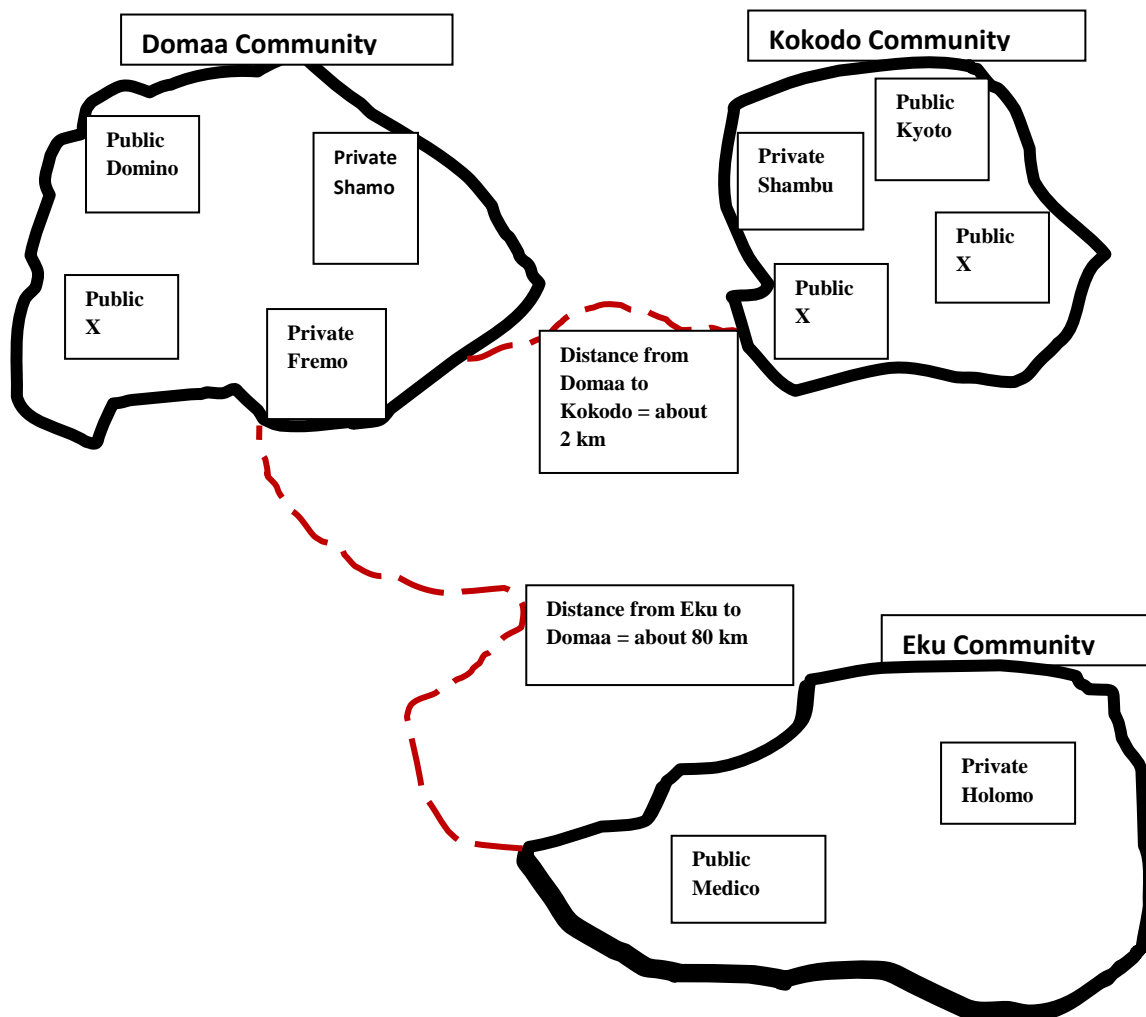
Source: Author's construct, 2010

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[14] Schools denoted as Public X are schools not included in sample of schools

Secondly, given that the communities in the two circuits were scattered, coupled with difficulty of access due to bad roads or the lack of accessible roads at all in some instances, only three out of the six communities in the two circuits could realistically be selected for the study.

Thirdly, although these circuits were among the most rural in the district, their communities hosted both public and low-fee private schools within a range of 500 to 900 metres; the close proximity of these school was required for exploring the factors that made low-fee private schools accessible to the poor in rural environments.
The distance between the communities of Domaa and Kokodo was about 2 km and there were children from Kokodo who attended the LFPS in Domaa.

My experience as a research assistant on the CREATE project in 2006/7 made it easy to identify schools for selection as I was already familiar with them. Only two schools were selected from Eku community in Narkwa circuit – one public school and one low-fee private basic school that served about three neighbouring communities. Two communities were selected from Dominase circuit: Domaa and Kokodo. Domaa hosted a total of four schools, three being selected for the study – one public school and two private schools, one of which was unregistered. Kokodo community hosted a total of four schools, from which one public and one private were selected.

The household survey constituted those households with children in the selected schools, which enabled me to retrospectively explore the choices made by this group. Thus, unlike the Ghana Living Standards Survey, which draws a representative sample of households from the whole country, the population used in this study does not represent a typical household survey, and might therefore lessen the representativeness of the sample. However, as an independent researcher, I had neither the resources nor the time to travel around all the hamlets and conduct household enumeration. Nevertheless, the number of households (536) I covered was a comparatively large sample considering that the total number in the three communities combined was only about 2000. As a result, the approach I adopted for selecting households led to some clear conclusions.

4.5 The research processes

4.5.1 Conducting the household survey

Given that the main unit of analysis in this study is the household,[15] data were collected through a survey of those families with children in public and/or private school between the months of May and August 2008. Eight basic school teachers had been previously trained in household data collection by CREATE. The class registers of three public and four low-fee private schools were used to generate the sampling frame.

Since households with children in school were the focus of this study, grades were stratified in each school on the basis of initial entry and exit. Accordingly, households were identified for the survey from strata of children at four educational stages: grade 1 (primary school beginners); grade 4 (mid-primary school); grade 6 (end of primary cycle); and grade 7 (transition to junior secondary school). Grades 1 and 7 were selected because they represented entry and exit phases respectively with regard to basic school, and potentially signalled the stages at which the issue of cost of schooling to households became acute.

Even though my initial intention was to draw a random sample of households to be surveyed from the class list, ultimately, the population of each class was taken to constitute the population of households for the study. This was because drawing a random sample rather the population would have resulted in a smaller sample of households with children in LFPSs, making inferential statistical analysis impossible. Thus, the population of the class constituted the population of households for the survey. The name of each school and the population of the households under study are indicated in Table 4.1.

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[15] In this thesis, a household refers to family members who lived under the same roof or in a single compound, shared common meals and a resource pool, and had slept in the compound for at least 15 nights during the previous month.

Table 4.1: School type by grade/class and sample size

Class/grade	1	4	6	7	Total pupils	Households surveyed
School Name			Number of pupils per class			
Fremo Private	36	29	14	20	99	63
Shamo Private	13	19	7	8	47	45
Holomo Private	17	17	20	12	66	54
Shambu Private	24	20	16	20	80	41
Domino Public	29	20	34	25	108	77
Kyoto Public	39	54	42	25	160	80
Medico Public	65	59	56	63	243	176
Total	223	218	189	173	803	536

Note: the relative locations of the schools can be seen in figure 4.3.

Source: The author (field data, 2008).

It is important to note that once the survey was underway, it was realised that some households had more than one child in school, or in different grades and/or school types. Therefore, pupils from the same family but in different schools or grades were captured under one household. In all, only 9 households could not be reached due to relocation; thus, the final number of households surveyed totalled 536 (see Table 4.1). However, by identifying households for the survey in starting with children who were in school, I was able to gather the relevant data.

4.5.2 Selection of participants: finding my interviewees

The selection of different categories of household members and teachers for interview was made in August 2008 and January 2010. Firstly, in 2008, three categories of household member within the lowest income quintile were selected for interview. These were household heads who had children in public school only, private school only, or both. For example, if a public school pupil had a sibling in private school, then this constituted one category of household to be interviewed; while pupils in public or private school but with no sibling in either constituted the other two types of household. Therefore, I requested from each school details of those children in these three

categories, generating a list of 101 households of which 41 were within the lowest income group.

In total, 38 household heads agreed to be interviewed, a figure comprising 14 who had enrolled all their children in public school only; 13 who had enrolled them in private school only; and 11 who had opted for a mixture of public and private schooling. In addition, 12 household heads were selected and interviewed on the basis of their survival and management strategies. Therefore, these 38 households represented a carefully selected sample intended to facilitate an exploration of schooling decisions and survival strategies. Thus, the selection of such categories of household head was not intended to indicate representativeness of a population sample (Merriam, 1998; Bryman, 1988), but to explore criteria informing schooling decisions and survival strategies that were implemented.

The second group of interviewees was selected in January 2010. This group comprised head teachers, teachers, parents, School Management Committee (SMC) members and Parent Teacher Association (PTA) executives. Table 4.2 represents a breakdown of participants interviewed.

Table 4.2: The non-random sample of participants

Type of participant	Number of participants			
	Public Only	Private only	Public & private	Total
August 2008				
Household heads in the lowest income group with children in school	14	13	11	38
January 2010				
Head teachers	3	3	-	6
Teachers	7	7	-	14
Parents not household heads	4	2	2	8
SMC executives	3	-	-	3
PTA executives	3	3	1	7
Total	34	28	14	76

Source: The author (field data, 2008/10).

Furthermore, to explore how households related to their schools of choice, parents, and PTA and SMC executives were purposively sampled. The use of such sampling was required in order to discover the detailed views of parents and teachers on how their relationship with the school influenced decisions in matters of education. It was also intended to determine what LFPS practices attracted some poor households. Finally, four low-fee private school teachers were also purposefully selected for interview in order to explore their working conditions and how they perceived the future development of their schools. Thus, the use of purposeful sampling enabled me to learn more about those issues most significant to the study (Boeije, 2010).

4.5.3 Conducting classroom observation

Four schools were selected for observation of teacher contact time. In Eku, one public and one low-fee private school were selected, being the only schools in the locality. However, in Domaa, there were four schools clustered in the same area and one public and one private school were selected from these. Teaching timetables of schools selected for observation were collected from class teachers.

The first week was devoted to familiarising myself with the schools, teachers and pupils. I also used this time to create an atmosphere of trust and a less tense environment for observation (May, 1997). This was carried out after first informing the head teacher and then the teachers of my intention to observe school life and the interaction of the children in the classroom. In the second week – when the actual classroom observation was conducted – using the school teaching timetable as an observation protocol, grades 1, 4 and 6 were observed to ascertain the extent of contact time utilisation, noting the amount of time the teacher spent on activities in the classroom.

During this period, a number of activities – including rehearsals for Independence Day celebrations – interrupted the normal school day. This setback notwithstanding, data derived from classroom observation were significant in understanding time utilisation in public and private rural basic schools, a point that is discussed further in chapter 7.

4.6 Methods of data collection

A number of data collection tools were employed, which comprised the survey questionnaire, the interview and classroom observation. A detailed discussion of the methods of data collection is contained in the following three sections.

4.6.1 The household survey

The survey design was adopted from the CREATE research project (Akyeampong et al., 2007). I used the project's household questionnaire, which had already been validated and contained both open and closed questions, to gather my own data. The questionnaire, which had four main sections, was administered by the researcher and research assistants in the form of an interview (see Appendix 2). Section 1 provided a roster of household resident members, and captured demographic and basic education details. Section 2 contained questions relating to household schooling expenses for children between the ages of 4 and 16 years. All schooling expenses data were reported for all children in the household who were enrolled in school.

Trained research assistants interviewed household heads to estimate the direct daily, weekly and monthly school expenses for each child in public or private school in the same household. In collating data on the direct cost of schooling, all such household expenses for each child were grouped into those appertaining to public or private school. Households that had children in both public and private school had their expenses placed under the school type that the child attended; for example, in a household in which there was one child in public and one child in private school, the expenses for each were recorded separately. Thus, the direct household cost of schooling was divided into public and private.

Section 3 contained questions on household dwelling, and services such as type of housing and ownership; source of and distance to water sources; sanitation; and type of energy/fuel used. Section 4 had two subsections that contained questions intended to examine household assets ownership, and sources of livelihood and non-employment income respectively. However, with regard to income, using the local dialect (Fante), the researcher and research assistants helped interviewees estimate how much each

adult member contributed. The monetary value of productive outputs such as the harvest from the farm and other household productive activities was added to the total to obtain the estimated yearly household income. Households were also asked to provide information on support received from social networks (friends and relatives) towards meeting the education expenses of their children.

4.6.2 Gathering school data: revenue, costs and input

School revenue, costs and input data were gathered using questionnaires (see Appendices 8-12) designed by the researcher during the first quarter of 2010. The questionnaire was given to head teachers after explaining what it was about and asking whether they would be willing to provide the required data. In all, three public schools and three low-fee private schools provided data, with one low-fee private school declining.

For all the public schools under study, head teachers were each given a questionnaire to elicit data on teacher salaries and school inputs. Three of the four head teachers of the low-fee private schools under study willingly agreed to respond to the questionnaire. It took about a week to complete and return it; but while two of the low-fee private schools returned the completed form within a week, it took one school about a month to complete and return theirs. Questions included the previous term's school fees per pupil, extra class fees, and total enrolment by grade. For the sake of validation, some household heads were also asked to provide information on a few items such as extra classes and PTA contributions. Generally, with the exception of one household head, responses tended to be consistent with those of the schools.

Finally, additional data on standardised test scores in English and Mathematics – conducted by CREATE in 2007 and 2008 in four low-fee private schools and six public schools in the study circuit – were collected for analysis. The level of the tests was grade 3 and they were administered to pupils of grades 3, 6 and 7.

4.6.3 Gathering qualitative data: interviews and classroom observation

With support from my research assistants, from July to August 2008 and January to March 2010, I identified and selected for interview suitable households in each of the

communities under study (see Appendix 3 for interview guide). Generally, in each of the qualitative interviews, a similar procedure was followed for collecting data: the researcher and research assistants contacted prospective participants, explained to them the purpose of the interview, and asked if they would be willing to participate. On some occasions, respondents set specific times for their interviews.

The semi-structured interview guide allowed the researcher some latitude in probing beyond initial answers (May, 1997; Marshall and Rossman, 1999). All interviews were audiotaped, with the exception of one with four low-fee private school teachers that solicited information on their working conditions and professional future plans; the reason being to allay any fears of the details being kept on file and to encourage them to provide true and accurate information.

Almost all the interviews were conducted in Fante and transcribed into English the same day. Even though I am not a Fante, I have lived and schooled with them and speak fluent Fante. My understanding of the local language made it possible to probe allusions that were significant to an understanding of the context in which they perceived the value of education and the school choice decisions they made. For example, one interviewee commented that, 'Elders say that if you like cheap things, you will end up eating worms.' Further elaboration elicited the notion that fee-free education without good quality teaching would result in worthless investment on the part of the household.

Interview questions were pilot tested in one of the communities in Mfantseman district. The goal of this exercise was to practise interviewing techniques, and to determine whether the questions were clear and effective in getting responses. The pilot test of the interview guide also enabled me to select Fante words and phrases that successfully elicited sought-after information, for example, views on the 'value' of education.

Teacher contact time data collection started a week before actual classroom observation. Head teachers and teachers were informed of a limited objective for the observation – the manner in which teachers and pupils interacted inside and outside school. This was necessary because if I were to have informed the teachers of the exact reason, they would have behaved differently and thus biased the data. As Gans (1962) argues:

If the researcher is completely honest with people about his activities, they will try to hide actions and attitudes they consider undesirable, and so will be dishonest. Consequently, the researcher must be dishonest to get honest data (cited in Bryman, 2008: 116).

Even though I was open and honest with participants throughout the research process, in order to ensure the collection of candid data on the attitudes of teachers towards time management in the classroom, the exact reason for classroom observation was not made known them.

In each school, the teaching timetable was employed as an observation protocol. Teachers' time management in the classroom in respect of three grades/classes (1, 4 and 6) was gauged against the school's teaching timetable (see appendix 7 for teaching timetable) in order to determine how much time was actually spent teaching in public and private schools respectively.

4.7 Data analysis

As this study was designed to employ a concurrent nested strategy with quantitative data dominance, firstly, household survey data were analysed using stata version 10.0, which generated descriptive statistics such as frequencies, percentages, quintile estimates, and averages. This was necessary because it enabled my familiarisation with the data, and also allowed exploration of the socio-economic characteristics of the communities under study and the patterns that emerged from the data. An average cost estimate was used to establish principal schooling expenses and the percentage of total household income they represented. Furthermore, a mean deviation t-test analysis was conducted to determine whether the direct costs of public and private schooling differed.

The descriptive analysis was followed by a regression analysis of household school choice using multinomial logistic analysis. With the assertion that the poor access low-fee private education in rural areas, the regression analysis tested the hypothesis that socio-economic factors do not affect household school choice in the poor rural

communities under study. Harma (2008) notes that school choice can be examined at the child level or the household level. Since the household is where schooling decisions are made and it is also the main unit wherein life chances are affected by poverty (Alderman et al., 1995; Harma, 2008), school choice in the rural communities of Mfantseman was examined at this level.

Three household school choice options were identified: public only, private only and a mixture of both (the combined option). Two hundred and seventy-nine households opted for public school only, 135 chose private school, while 111 settled on the combined option (see Table 8.3). Nine households only could not be contacted due to relocation. As a result, the outcome variable for household school choice in this analysis is represented by trichotomous variables dependent on whether a household chooses public school, private school or the combined option (coded 0 for public, 1 for private, and 2 for combined option), which is regressed by household head, household and child characteristics (see Appendix 4 for a description of variables). Kingdon (1996) used a similar analysis to explain school choice in urban India. In Vietnam, Glewwe and Patrinos (1999) also used multinomial logistic analysis to explain school choice, employing nationwide standard-of-living survey data and most of the same explanatory variables.

Moreover, in order to explain patterns of household education expenditure, a standard regression analysis was conducted by regressing the outcome variable (the log of total education expenditure per child) by household head, and household characteristics, and the type of school the child attended (see Appendix 5 for description of variables). Glewwe and Patrinos (1999) used standard regression analysis to explain household education expenditure using similar explanatory variables.

To address the question of the extent to which the growth of the low-fee private school is sustainable, analysis of the ability of households to meet the cost of private schooling examining the proportion of household income expended on education per child. It also used data on pupil enrolment and fee payment for the previous school term to analyse household ability to afford the cost. Accordingly, expected fee revenue, fee arrears, and total fee arrears as a percentage of total fee income were estimated. Total school

revenue was also estimated by adding fee income to the estimated income generated from extra classes.

In addition, the operational costs of three low-fee private schools were modelled, and estimates of salary cost and non-salary cost were made and compared with total school revenue (see Table 8.13). Teacher turnover in low-fee private schools from 2007 to 2009 was estimated. The mean, median and mode of teachers' monthly salaries in both public and low-fee private schools were estimated and compared on the basis of data provided in the school questionnaire. Four LFPS teachers were also interviewed in order to understand their working conditions and how they perceived their professional development in the low-fee private education sector.

In determining whether the quality of education in LFPSs was higher than that of their public counterparts in similar rural environments, input data such as teacher training, pupil to teacher ratio, and examination results of low fee private and public school in the study communities were examined. Firstly, teacher qualifications and other inputs such as school infrastructure were compared. Secondly, low-fee private school BECE results in rural Mfantseman from 2007 to 2009 were compared with those of public schools in a similar environment. Finally, a regression analysis (using OLS) was conducted to determine the performance and progress in English and Mathematics tests of private and public schools respectively. Subsequently, the outcome variable (English and Mathematics test results) was regressed by the background characteristics of pupils and the schools (primary and junior high) that took the tests (see Appendix 6 for description of variables).

Qualitative in-depth interview data analysis involved the construction of themes and sub-themes through the use of constant comparative method (Merriam, 1998; Creswell, 2003). Units of data or pieces of information – including words or phrases that revealed knowledge relevant to the research questions such as what informed household school choice decisions, and the nature of the interaction between parents and schools – were placed in groups that had characteristics in common. These units of data were then compared for recurring regularities and patterns (Boeije, 2010; Merriam, 1998). Themes that emerged from the data constituted the basis for analysis and quotations from respondents were used to support the themes.

4.8 Confronting ethical issues

The mixed methods design adopted by this study means that not only quantitative survey data were gathered but qualitative interviews and classroom observations were also conducted. Since these data are derived from the field, they ultimately have attendant ethical issues that need to be confronted. Firstly, my own perception, which has been shaped by living in urban environments all my life, could have conflicted with my role as a researcher in the interpretation of social phenomena. For example, I subscribe to the general perception that rural dwellers did not value education. As a result, I needed to constantly remind myself of my dual role as an insider and outsider in the research process, thus ensuring that my perception did not influence my interpretation of rural people

An issue that deserves important ethical consideration is the nature of data appertaining to household income and the operational costs of schools. This is sensitive information that requires a good deal of patience and tact to collect. For example, in rural agricultural communities, determining household income is not a straightforward task. Instead of directly asking people how much they earned, it was necessary to engage them in conversation, enquiring what crops were cultivated the previous year and how much was harvested before adding a value estimate of this input to their total output. Some households used this as an opportunity to stress their poverty and therefore provided the information as evidence of their challenges. Clearly, not asking households directly but using an estimation of the previous year's output made the process of calculating income laborious and it took several hours, but there was no way round it.

A further issue is that since this study gathered data on income from both registered and unregistered private rural schools, the fear of being reported to the education authorities or assessed for tax payment could have resulted in non-disclosure, while those who did acquiesce could have provided inaccurate information. The sensitive nature of such information could have made some households and head teachers reluctant to participate, particularly if they realised that "assurance of confidentiality is weak, vague and not understood" (Cohen et al., 2000: 62). However, I was generally able to gain the trust of participants through a number of school visits intended to establish a rapport with them (May, 1997; Villiamy et al., 1990).

Before I embarked on this study, I had already undertaken a number of regular trips to the site, which meant that access to prospective respondents was made easier. All research participants, including those involved in the household survey and interviews, were personally asked whether or not they were willing to take part in a study of their children's basic education; and all those contacted wholeheartedly agreed to participate. This was because their children's education was an emotional topic and there was therefore general interest in talking about it.

In addition, school heads and teachers were assured in writing of the researcher's commitment to utmost confidentiality and anonymity. Many of the household interviewees were illiterate but in all instances, I obtained participants' informed consent by explaining to them the purpose of the study, and verbally assuring them of confidentiality and anonymity (Bryman, 2004; Nichmias and Nichmias, (1996).

The fact that the study sites were farming and fishing communities meant that I was likely to intrude on the daily routines of my respondents. Thus, I ensured respect for their livelihood activities and lifestyle by arranging convenient times for interviews. This led me to meet interviewees on specific days – for example, on Sundays after church; Wednesdays, when some households refrained from farming; and also on Tuesdays, when they did not engage in fishing activities since it was considered culturally taboo to do so.

Finally, I asked for permission to audiotape interviews, a request that none of the respondents refused. Moreover, utmost care was taken in storing data in computer files, and households and schools were given pseudonyms to ensure confidentiality during the analysis (Bryman, 2004). Throughout the study, ethical considerations continued to remain significant in order to protect and ensure the dignity of all participants.

4.9 Summary

This study employed a mixed methods approach – the concurrent nested strategy, which involves the combination of quantitative and qualitative data – allowing the various questions (qualitative and quantitative) and hypotheses relating to the key research

questions exploring the factors that made low-fee private schools accessible to the poor to be addressed. Therefore, the survey of households that had already made the decision and actually had children in school, and interview and classroom observation data were used to explore the various aspects of the study that could not be fully addressed by using either type of data exclusively.

The household survey sample was drawn from those communities in the circuit that hosted both public and private schools, and which were also proximate to each other. Thus, households containing a purposively stratified sample of children in grades 1, 4, 6 and 7, in three public and four private schools in the communities under study were surveyed. Even though this was not a comprehensive household survey, it clearly represented those households that had already chosen a school for their children. In addition, epistemological and ontological considerations, as well as my identity as a researcher and the concomitant ethical issues were carefully thought through. Therefore, the study provided a fair representation of issues related to information derived from the data. The next chapter examines the socio-economic profiles of households in the communities under study, using data derived from the household survey in order to understand how the poor might respond to private schooling in a rural environment.

Chapter 5: Socio-economic profile of the study rural communities.

5.1 Introduction

Generally, households in rural Mfantseman are poor. However, within that poor environment there are variations in the socio-economic conditions of households that live there. Also, within different rural localities there are characteristics of that community that can influence the choices they make. This chapter sets the scene for the study of rural communities in the Mfantseman District. It provides a detailed picture of the socio-economic profile of households with children in school in the three rural communities. The goal is to provide an accurate picture of the extent of poverty in these areas and the extent to which the socio-economic conditions might contribute to levels of access to schooling and particularly their response to private schooling. Finally, key issues in this chapter are summarised to provide a clearer picture of the study sites and also to provide a solid basis for the analysis in the next three chapters. However, before analysing the survey results, a brief discussion of the overall socio-economic and geo-political context of Mfantseman is provided.

5.2 Context

The Mfantseman District is located in the Central Region of Ghana and is one of 138 administrative districts in the country. It has a total population of 152,264 constituting about 7% of the total population of the region (GSS, 2005a). Even though not considered as one of the 40 deprived districts, it is located in the fourth poorest region of the country (GSS, 2000). Of the 12 administrative districts in the Central region, the Mfantseman district has been identified as one of the poorest with about 60% of its total population considered to be living below the poverty line of a dollar per day (GSS, 2007; MDA, 2006; GSS, 2000). The major economic activities are farming and fishing with about half (49.4%) of the adult population engaged in agricultural, animal husbandary and forestry (GSS, 2005a). Farming activities are rain fed and with the perennial erratic rainfall patterns and improper farming practices, many farmers can only produce at the subsistence level. School attendance is low- gross enrolment at primary and Junior high school levels stand at 70.1% and 67.6% respectively (GSS, 2000). Only 37.9% are literate in English and one Ghanaian language. About 33% of the total population are never enrolled, with 16.6% of these between the ages 6-14 years (GSS, 2005). Compared to the other districts in the region, Mfantseman has the greatest

proportion of school age children who are never enrolled (GSS, 2005a). Thus, this is a district where one could describe as poor, with its rural communities facing various deprivations including unreliable sources of livelihoods and access to education.

5.3 Geo-political and administrative profile

Mfantseman lies along the Atlantic Coastline and extends from latitude 5^0 7′ to 5^0 20′ North of the Equator and Longitude 0^0 44′ to 1^0 11′ West of the Greenwich Meridian and stretches about 21 kilometres along the coastline with about 13 kilometres inland. In terms of land area, the district covers an area of 612 Square Kilometres which is bounded to the West and Northwest by Abura-Asebu-Kwamankese District to the North by Ajumako Enyan Essiam District and Assin South District, to the East by Gomoa District and to the South by the Atlantic Ocean (see figure 4.2). The district is a low lying area with an elevation lower than 60 metres above sea level and has a number of rivers and lagoons which run into the sea (MDA, 2006). However, these rivers such as Otchi and Narkwa have been polluted by human activities such as washing, bathing and dumping of solid and liquid waste.

Again, with its proximity to the Atlantic Ocean, the district has a relatively mild temperature that ranges between 24^oC and 28^oC, but with a relatively high (70%) humidity. The Mfantseman district can be classified into two zones: Coastal Savanna and Interior Forest Zone. These two zones experience different rainfall patterns. The Coastal Savanna tends to have relatively lower rain fall and has an annual rainfall between 90cm and 110cm compared to the Interior Forest Zone where annual rainfall ranges between 110cm and 160cm. According to the MDA (2006), the Mfantseman District was once a forest area, but bad environmental practices such as bush burning and cutting of timber contributed significantly in destroying the forest. For example, in the interior areas of Akobima, Dominase, Kyeakor and the neighbouring rural communities, there is evidence that valuable timber have been cut, creating devastating effect on farmlands. However, there are still pockets of relatively dense forest areas in the hinterland. The long coast line and pockets of forest areas in the district have enabled both fishing and farming activities to thrive. The cultivation of crops like cocoa, cocoa yam, oil palm, pineapples and plantain has been made possible due to favourable conditions in the forest areas. Further, the district is endowed with

significant deposits of natural resources such as kaolin, ceramic material and oil which when exploited could expand the economic opportunities of the district.

There are 168 settlements in the district with only about 24% of its population living in urban areas making Mfantseman a rural district (GSS, 2005a). For ease of political administration, the district has been divided into four functional administrative hierarchies with the district capital Saltpond as the first level, Mankessim at the second level; Anomabo, the third level; and fourth level is Yamoransa. Even though Saltpond is the district capital, it is not as densely populated as Mankessim which acccounts for about 16.7% of the total population. Mankessim is a commercial centre and acts as a central point for all commercial activities in the district. Table 5.1 indicates the top twenty settlements in the district.

Table 5.1: Population of top twenty settlements in the Mfantseman District

TOWN	TOTAL POPULATION	MALE POPULATION	FEMALE POPULATION
Mankessim	25, 481	11, 511	13, 970
Saltpond	16, 212	7, 302	8, 910
Anomabo	9, 437	4, 290	5, 147
Biriwa	7, 737	3, 696	4, 041
Kormantse	6, 296	2, 947	3, 347
Narkwa	5, 859	2, 721	3, 138
Otuam (Tantum)	5, 093	2,523	2, 570
Asaafa	4, 273	1, 941	2, 332
Abandze	3, 354	1, 636	1, 718
Baifikrom	2, 805	1, 336	1, 461
Kyeakor	2, 231	1, 023	1, 208
Dominase	2, 193	1, 005	1, 188
Yamoransa	2, 080	1, 038	1, 042
Immuna	1, 784	753	1, 031
Ekumpoano	1,779	777	1, 002
Essarkyir	1, 682	740	942
Abor	1, 556	714	842
Eyisam	1, 452	612	840
Essuehyia	1, 429	645	784
Ekrawfo	1, 367	593	774

Source: GSS, 2000

 In terms of educational administration, the district has been divided into eight educational circuits: Saltpond, Mankessim, Eyisam, Yamoransa, Essarkyir, Dominase,

Anomabo and Ekumfi Narkwa. (refer to page 71 to see a map of the Mfantseman District)

Apart from Dominase Circuit, all the educational circuits are partly coastal areas. In terms of number of basic schools, available data indicate a total of 288 public basic schools excluding senior secondary and vocational schools, while private basic schools totalled 113 in the district (MDA, 2006). This makes the ratio of the number of public basic schools to private about 3:1 compared to an enrolment ratio of 5:1 in the district. Since the number of private schools reported in MDA (2006) are those officially recognized, this ratio could well increase for private schools if all unregistered private schools are considered. This study focused on public and private basic schools in two rural educational circuits: Dominase and Narkwa. Two public and three private schools were chosen from Dominase circuit, while the only two schools in Narkwa , one public and one private school were selected from Narkwa circuit. Clearly, the total sample of schools is very small. However, the reason guiding the selection of schools was not simply a question of the number of schools, but rather the study was interested in looking at public and private schools in clearly defined communities that were proximate to each other. This was required to understand the complexities of households' schooling decisions within the communities. Table 5.2 indicates number of schools by circuit in 2005/2006.

Table 5.2: Number of basic schools by circuit, 2005/2006

	Public Schools		
Circuit	Nursery	Primary	JHS	Total
Saltpond	12	16	13	44
Anomabo	17	18	17	54
Mankessim	13	16	15	45
Dominase	9	**9**	**7**	25
Narkwa	9	**12**	**10**	31
Essarkyir	13	13	11	37
Yamoransa	8	8	4	20
Eyisam	12	16	10	38
Total	93	108	87	**288**
	Private Schools		Total
Saltpond	4	5	3	12
Anomabo	7	7	4	18
Mankessim	16	15	9	40
Dominase	3	**3**	**2**	8
Narkwa	6	**6**	**2**	14
Essarkyir	3	3	3	9
Yamoransa	3	3	1	7
Eyisam	2	2	1	5
Total	44	44	25	**113**

Source: Mfantseman District Assembly (MDA), 2006.

In short, as a rural district, Mfantseman is faced with economic and social deprivation (GSS, 2005b), with the extent of deprivation severe among the interior rural communities that depend on seasonal subsistence farming and fishing. Narkwa and Dominase educational circuits are examples of such communities, which have relatively low ratios of public to low fee private schools and some households are having the opportunity to choose between these school types. Since the costs of education constitute a barrier to the poor households' access to education in Ghana (Oduro, 2000; Boateng, 2005; GNECC, 2005), it raises the issue of whether or not the poor in these study communities have real choice, and if they do, how are they able to afford the costs of schooling. The next section provides a socio-economic profile of the study communities using the survey data on households that have children in school in order to understand how households respond to the demand for private schooling.

5.4 Mapping the households

The discussions on Mfantseman so far have focused on macro indicators to provide its socio-economic, geo-political and administrative characteristics. However, a much deeper analysis focusing on micro level data on the demographic, social and economics characteristics of households is required to explain the extent to which characteristics of geographical communities in these rural areas might interact to impact on access to schooling (see Figure 4.3 for relative location of study communities). Thus, three interior rural communities: Eku in Narkwa circuit; and Domaa and Kokodo in Dominase circuit were selected for in-depth micro analysis. Thus, the analyses that follow represent the socio-economic profile of households that have enrolled their children in school in the study communities.

5.4.1 Household composition by sex and status

A typical Ghanaian household is made up of the head, spouse, children, other relatives and non-relatives (GSS, et al., 2004). Table 5.3 shows the composition of household members in study rural communities. Household head constitutes about a fifth (19.6%) of household members. In terms of gender, male heads are about a fifth (22.6%) of the total number of males in the household compared to female heads representing 16.6% of total female members. Male heads appeared not to live with their spouses in the same household compared to female heads. Across communities there are more female household members in Eku and Domaa (50.5% and 51.7% respectively), but with a

greater proportion of male household members (52.2%) in Kokodo. The large proportion of male household heads in Kokodo could be explained by it being a predominantly Moslem community where men are often the household heads, while the large proportion of female household members in Eku might be explained by large number of men embarking on migrant fishing. However, it is not too clear what might explain that of Domaa. Probably with the route to Kumasi [16] passing through the community, men looking for better opportunities migrate to the big city. Informal interviews with school heads reveal that some parents who migrate with their children do return with the children to re-enrol at school, while others do not when they find a better employment opportunity elsewhere. Consequently, in the fishing community, lack of sustained attendance and seasonal school dropout appears to be a common phenomenon.

Among the children in the households that were not married (unmarried children), biological children of household heads constitute almost about half (47.3%) the total household members with a greater proportion being males. Unmarried children fostered (2%) or adopted (0.1%) constitute an insignificant proportion of number of children in the household. This observation is not surprising because the practice of fostering out of rural area to urban area is more common phenomenon than vice versa and is consistent with similar findings in Ghana by Glewwe and Jacoby in 1994. However, the number of grand children is proportionately higher (about 7%) than the combined number of fostered and adopted (2.1%) children in the households. A cursory observation of households in the communities indicate that most of these grandparents are either too old or weak to provide the kind of support children need, consequently children under such caregivers might run the risk of irregular school attendance or dropping out of school. Other relatives and non-relatives of household heads constitute less than 6% of household members. In the rural areas where there used to be a significant proportion of household members other than the biological children of the household heads (GSS, 2005a), the proportion of other relatives and non-relatives (6%) is clearly an indication of the changing dynamics of the family system.

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[16] Kumasi is the second largest city in Ghana

Table: 5.3: Percentage of household composition by relationship to household head, sex and community

Household composition	Male	Female	Total
Household head	22.6	16.6	19.6
Spouse	3.1	17.2	10.2
Married child	9.6	6.7	8.2
Unmarried child (biological)	49.4	45.1	47.3
Unmarried child (fostered or cared for)	2.5	1.4	2.0
Unmarried child (adopted)	0.1	0.1	0.1
Grand child	8.4	5.4	6.9
Father/Mother	1.7	4.4	3.1
Father in-law/Mother in-law	0.5	0.5	0.5
Brother/Sister	1.0	1.1	1.1
Brother in-law/sister in-law/other relatives	0.6	1.0	0.8
Servants/employee/ other non-relative	0.6	0.3	0.4
Total	100	100	100
N	1,368	1,380	2,748
Community			
Eku	49.5	50.5	100
Domaa	48.3	51.7	100
Kokodo	52.2	47.8	100

N=2,748, Missing cases=12
Source: Field Data, 2008

However, it is important to note that, even though children constitute more than half the total household members, each household has a mean of two children actually in school (Table 5.4). Generally, about a quarter of the households (26%) have two children in school, and about a fifth with one and three in school. Households with four children constitute 16.5%, and about one of every ten households has five children in school. A larger proportion of children in school per household is more evident in Domaa and Kokodo. As can be seen, in Domaa one out of every ten households has five children in school, while in Kokodo almost a fifth (17.9%) of the households have five children in school. The large proportion of children in school per household in Kokodo could be attributed to the large proportion of Moslem household heads that tend to favour large family sizes.

Table 5.4: Percentage of the children in household actually in school

Household characteristics	Community (%)			
	Eku	Domaa	Kokodo	Total
Children in school				
one	36.8	17.4	9.4	23.9
two	25.4	30.5	19.7	26.0
three	20.6	24.2	23.9	22.9
four	9.6	17.4	26.5	16.5
five	4.8	10.5	17.9	9.7
six	2.2	0.0	2.6	1.5
seven	0.4	0.0	0.0	0.2
Total	100	100	100	100
Overall Total	466	519	283	1,268
Mean	2	2.7	2.4	2.4

 Source: Field Data, 2008

Even though the mean child in school per household is two, it is evident that across communities, Domaa and Kokodo tend to have more children per household in school than in Eku. Clearly, the size of the household and the number of children that are in school could influence how household respond to the demand and choice of schooling (Colclough, et. al., 2003).

5.4.2 Household head characteristics

The household head whether male or female assumes the role of a manager of the household. Thus, to understand micro issues such as resource allocation decisions and choices within a community, particularly in the rural areas, the household head is considered key.

Table 5.5 shows the percentage of household head by sex, religion and schooling decision. As noted earlier, there are more male heads (58.6%) than female heads (41.4%). Eku and Domaa communities have more than half of the household heads being males, while Kokodo has more than two thirds of the heads being males. The large proportion of male heads in Kokodo (72%) could be due to greater proportion of Moslem households compared to the other communities.

Table 5.5: Percentage of household head by sex, religion and schooling decision maker

Household characteristics	Community (%)			
	Eku	Domaa	Kokodo	Total
Sex of household head				
Male	51.1	59.4	72.0	58.6
Female	48.9	40.6	28.0	41.4
Total	100	100	100	100
Religion of household head				
Christianity	86.1	97.3	54.2	82.9
Islam	7.4	1.1	45.0	13.6
Traditional	5.6	1.6	0.8	3.2
Other	0.9	0.0	0.0	0.4
Total	100	100	100	100
Decision to enrol a child in school				
Household head	98.7	100	100	99.6
Other (Aunt/Uncle)	1.3	00	0.0	0.4
Total	100	100	100	100

Source: Field Data, 2008

Generally, four out of every five households head are Christian (82.9%), Moslems constitute just 13.6%, representing about one tenth of households. Traditional and other religions constitute less than 4%. While studies of the impact of religion on household demand for schooling in developing countries have shown inconsistent results (Colclough, et al., 2003), the large proportion of Christian household heads (83%) could impact on household schooling decisions and choices. To the question who takes the decision to enrol a child in school, almost all household heads (99.6%) indicated that they were responsible for that decision. Even though male heads were in the majority (59%), but there were about 41% female household heads some of whom owned relatively large farms or undertook food processing and petty businesses. These are women with economic capital who could therefore influence the schooling decision of children in the household (Al-Samarai and Peasgood, 1998). Only 1.3% in Eku reported that members other than the household head were responsible for deciding on whether or not the child goes to school. This suggests that in the study communities household heads are the key factor on household schooling decisions.

5.4.3 Marital Status of household head

Table 5.6 shows that a greater proportion of the households (64.6%) are headed by currently married persons, followed by never married persons who constitute almost a fifth (17.7%) of household heads. Widowed and divorced household heads put together constitute almost a fifth (17.8%) of household heads, but with more female head widowed or divorced than male heads across communities. The large proportion of female head either widowed or divorced could be explained by the higher remarriages among men after the death of a spouse. This finding is consistent with the GSS (2005a; 2005b) where it has been argued that probably more young women marry older men who die and leave them widowed.

Table 5.6: Percentage of household head marital status

Marital status of household head		Community (%)						
		Eku		Domaa		Kokodo		
		Male	Female	Male	Female	Male	Female	Total
	Never married	24.1	19.4	3.6	3.9	2.4	12.1	17.7
	Currently married	67.2	46.3	86.5	31.6	92.9	45.5	64.6
	Widowed	6.0	20.4	0.9	17.1	3.6	15.2	9.7
	Divorced	0.9	13.0	3.6	21.1	0.0	24.2	8.1
	Separated	0.9	0.9	5.4	26.3	0.0	0.0	5.3
	N/A	0.9	0.0	0.0	0.0	1.2	3.0	0.6
Total		100	100	100	100	100	100	100
N		116	108	111	76	84	33	528

Source: Field Data, 2008

Moreover, being a polygamous society, a household head with more than one wife may not be considered widowed even if one of his wives dies. But considering that most women's economic survival depends on their men's harvest from the farm or sea, female household heads widowed, divorced or separated are likely to encounter economic hardships and hence this could affect their ability to support their children's schooling and the type of school they choose. The likely impact of the gender of household head on school choice and educational expenditure of the household will be explored in later analyses.

5.4.4 Housing

The type of dwelling, number of living rooms and facilities a dwelling has could provide a basis for understanding households' economic status. Households with fewer living rooms compared to the number of occupants could be a source of spread of communicable diseases. In addition, absence or inadequate sanitary facilities including toilets pose health hazards to household members. Table 5.7 indicates that most dwellings (44.9%) are semi-detached and about a third are separate houses mostly made from mud. Again, almost one out of every ten households lives in a hut or tent. Those living in huts and tents are most likely to be households in the lowest income group in the rural communities. Moreover, the number of living rooms each household has ranges from 1-20, with about a quarter (24%) of the households having two living rooms and almost a fifth with just a single room. Generally, the number of living rooms ranging between 1-2, constitute about a third of all the households in the rural communities, while a quarter of the households had between 3-4 living rooms. Across communities, over half (58.5%) of households in Eku have between 1-2 living rooms, while Domaa and Kokodo have a quarter and a third of the households respectively with 1-2 living rooms. It is important to note that most living rooms serve dual purposes of sleeping and living, and according to GSS (2005b) over half (54.9%) of the total population of the Mfantseman District have just a sleeping room. Clearly, these housing conditions reflect the relatively low economic status of most households and would be used to explain later analysis.

In terms of ownership of dwellings, majority (57%) of the households owned their houses. This is a common phenomenon in rural areas probably because most of these buildings are made from mud or thatch, and may not be too costly compared with a cement block buildings. But even where a household does not own the house, the extended family provides rooms for members who have no houses of their own and this is evidence by about a third (31.3%) of the households living in family property. Only about one out of every ten households (11.7%) in these rural communities rent their house. Since renting a house is not a common practice among indigenous people in rural communities in Ghana, it is most probable that those renting are either migrant workers or government sector workers including teachers and community health workers.

Table 5.7: Housing characteristics of rural communities

Percentage distribution of households by household characteristics and communities

Household characteristics	Dwelling of rural Community (%)			
	Eku	Domaa	Kokodo	Total
Housing				
Type of Dwelling				
Separate house	30.1	39.8	31.6	33.8
Semi-detached	45.9	31.2	65.0	44.9
Flat/Apartment	5.7	12.9	1.7	7.3
Hut	12.6	7.0	0.9	8.1
Tent	0.9	0.0	0.0	0.4
Living quarters attached to office/shop	0.0	1.6	0.9	0.8
Compound	4.8	7.5	0.0	4.7
Total	100	100	100	100
Number of living rooms in the dwelling				
One	26.2	10.2	14.0	18.0
Two	32.3	16.7	19.3	24.0
Three	15.3	13.4	19.3	15.5
Four	8.3	15.6	13.2	11.9
Five	3.1	7.5	7.9	5.7
Six	4.8	7.5	6.1	6.0
Seven	1.7	8.6	4.4	4.7
Eight	2.6	4.8	4.4	3.8
Nine	0.9	4.3	0.0	1.9
Ten-Twenty	4.8	11.4	11.4	8.5
Total	100	100	100	100
House ownership				
Owns it fully	46.7	54.3	81.7	57.0
Rents it	8.3	17.2	9.6	11.7
Family property	45.0	28.5	8.7	31.3
Total	100	100	100	100
Toilet used by household				
Flush toilet	1.3	4.3	0.9	2.3
Pit latrine	2.6	73.1	51.3	38.0
KVIP	11.8	16.1	35.0	18.4
Bucket	7.4	1.1	0.0	3.6
Fields/Beach	7.		12.8	3.100
Total	100	100	100	

Source: Field Data, 2008.   N=526, Missing cases =10

Again, in the rural areas, houses are built often without the basic facilities such as toilets. Table 5.7 indicates that almost all the houses were built without toilet facilities. A greater proportion of households in these three rural communities used pit latrine (38%), the fields and beaches (37.8%), with almost a fifth (18.4 %) using the Kumasi Ventilated Improved Pit (KVIP). Only about 2% of all the households use flush toilets. Across communities, a greater proportion (76.9%) of households in farming and fishing

community (Eku) use the fields and beach as toilets, while Domaa and Kokodo, which are mainly farming communities use the pit latrine constituting 73.1% and 51.3% respectively of the households. Indiscriminate defecating at the beach or the bush poses health hazards to the community as it could lead to the outbreak of diseases including cholera and dysentery. A baseline report from the Mfantseman district corroborates this observation-malaria, stomach upset, and bilharzia were found to be common health problems impacting children's school attendance and performance (Ampiah, 2007). Clearly, the analyses show that in the study communities, lack of basic human needs such as clean water and quality physical environment such as housing and toilet facilities is a common place. According to the World Health Organisation (2010) these are all indicators of the level of poverty and the housing profile in rural Mfantseman fits this classification. However, within the communities there are some who have good housing facilities and could represent the small percentage of households that have the capacity to make a school choice.

5.4.5 Energy source and use

As part of its strategy to promote rural development, the government of Ghana over the years embarked on rural electrification projects. Even though not all rural communities today have access to electricity, the three rural communities involved in this study are connected to the national electricity grid. However, not all the households have electricity in their homes. Table 5.8 indicates that generally in all the communities, three out of every five households use electricity (60.6%). Across communities, only about a third (36%) of households in Kokodo use electricity compared to more than two thirds in Eku and Domaa. The commonly used cooking fuel in rural communities is wood. The proportion of households using wood for cooking is significantly high within and across communities. The use of Liquified Petroleum Gas (LP Gas) which is more environmentally friendly is rather negligible within and across communities. None of the households reported using electricity for cooking. The low use of LPG and electricity could be attributed to the relatively high cost involved in purchasing gas and using of electricity for cooking.

Table 5.8: Energy use by households

Household housing characteristics	Community (%)			
	Eku	Domaa	Kokodo	Total
Electricity				
Yes	60.2	76.2	36.0	60.6
No	39.8	23.8	64.0	39.4
Total	100	100	100	100
Fuel for cooking				
Wood	87.4	77.4	98.3	86.3
Charcoal	6.1	7.5	0.9	5.5
Gas	1.3	1.1	0.0	0.9
Wood and charcoal	5.2	14.0	0.9	7.3
Total	100	100	100	100

Source: Field Data, 2008; N=526, Figures are column percentages

Generally, the housing characteristics indicate about a third of households are living in inappropriate housing conditions which is a clear reflection of their deprivation. However, within this deprivation, there are some households (60%) that use electricity. A clear indication that not all are very poor and therefore may have the capacity to undertake school choice.

5.4.6 Sources and access to water supply

The provision and access to potable water supply is a prerequisite for reducing water borne disease among members of households particularly children. Whether households would be able to avoid water borne diseases such as bilharzia, cholera, diarrhoea, guinea worm and typhoid depend on the extent to which households can access potable water. A greater proportion (65.5%) of people having access to pipe borne water in Mfantseman lives in urban areas (GSS, 2005). Since the majority of about 76% of the populations in Mfantseman live in rural areas, it stands to reason that a greater proportion of the population may not have access to potable drinking water. Table 5.9 indicates households' sources and distance to water supply. The main source of water supply in these rural communities is from borehole (50.9%), but across communities households in mainly farming communities (Domaa and Kokodo) have about 72% and 83.8% of households respectively having borehole as their main sources of water.

Table 5.9: Sources and distance to water supply

Percentage distribution of households by household characteristics and communities

Household Housing characteristics	Community (%)			
Water	Eku	Domaa	Kokodo	Total
Source of water most often used in this household for drinking				
Piped into dwelling or compound	4.8	2.7	0.9	3.2
Borehole	17.3	72.0	83.8	50.9
Protected Well	16.0	11.3	12.0	13.5
Unprotected Well	21.6	4.3	0.9	11.0
Rain water	19.9	2.2	0.0	9.4
River/lake/pond/stream	3.0	6.5	2.6	4.1
Vendor/truck/sachet	0.4	0.0	0.0	0.2
Rain and unprotected well	12.1	0.0	0.0	5.2
Piped into dwelling/rain water	4.3	1.1	0.0	2.2
Protected well and rain water	0.4	0.0	0.0	0.2
Total	100	100	100	100
Water used for drinking come from the same source as the water used for bathing and washing				
Mostly yes	40.9	94.6	97.4	72.0
Sometimes	3.5	4.3	1.7	3.4
Mostly no	54.8	1.1	0.9	24.2
N/A	0.9	0.0	0.0	0.4
Total	100	100	100	100
Distance (metres) to fetch water (one way)				
Less than 20m	15.7	45.9	52.1	34.3
20m – less than 100m	13.1	23.2	30.8	20.5
100m – less than 500m	41.9	21.1	6.8	26.9
500m – less than 1km	16.2	6.5	7.7	10.9
1km – less than 3km	12.2	2.7	1.7	6.6
3km – more than 3km	0.4	0.5	0.9	0.6
N/A	0.4	0.0	0.0	0.2
Total	100	100	100	100

Source: Field Data, 2008; N=531

In Eku where fishing and farming are major economic activities, just a little below a fifth of the households (17.3%) derive their water from borehole. The main sources of water supply of households in Eku are unprotected well and rain water, constituting 21.6% and 19.9% respectively. In all, about one out of ten households (11%) use unprotected well as its sources of water supply.

To the question of whether drinking water comes from the same sources as bathing and washing water, the data revealed that more than two thirds (72%) of all the households mostly used the same source of water for drinking, washing and bathing, while about a quarter of the households (24.2%) used water from different sources to meet the

household's water needs. Across communities, two out of every five households (40.9%) in Eku used same source of water for all household needs, while four out of every five households in Domaa and Kokodo use the same sources of water for all domestic needs. Eku appears to be facing more difficulty in accessing potable water supply and thus tends to depend on three main sources of water supply: borehole, unprotected well and rain water. With about a quarter of households in Eku depending on unprotected sources of water, it could have serious health implications for households and children school attendance (Ampiah, 2007).

Distance from household to water sources also deserves mention because of its potential impact on children's regular school attendance and completion. In all, a third of households (34.3%) travel less than twenty metres to fetch water, constituting 15.7%, 45.9% and 52.1% of households across Eku, Domaa and Kokodo respectively. A fifth (20.5%) of households travel between 20 metres and 100 metres, while a quarter (26.9%) of all households with majority (41.9%) from Eku travels between 100 metres and 500 metres. One out of every ten households in Kokodo travels between 1kilometre and less than three kilometres. In all, 7.4% of households travel between 1 kilometre and 6 kilometres. While this proportion (7.4%) appears to be small, long distances to water sites away from home could impact negatively on children's schooling.

In short, almost 10% of households live in hut or tents, while those living in houses have an average of two living rooms per household most of which have no toilet facilities. In addition, about 10% of households consume water from unprotected wells. Health hazards due to poor sanitation and lack of potable water could subsequently impact on household income earning and children's ability to attend school regularly and active participation in classroom activities (Ampiah, 2007). Lack of potable water, poor housing and absence of toilet facilities are all indicators of poverty and this profile fits in well with the study communities. Thus, households with the above housing characteristics are most likely to be the poorest and this has implications for the decisions and choices they would make with regards to schooling.

5.4.7 Educational attainment of household members

Education is well known for raising economic opportunities, enhanced understanding and better appreciation of issues in the society. This link between education and

development has been well documented (Psacharopoulos and Woodhall, 1985; Rose and Dyer, 2006). Therefore, in the rural communities, all other things being equal, the higher the educational attainment of its members, the better economic opportunities the community will have. In addition, a well informed community will be able to make more rational decisions and choices concerning their lives including schooling decisions. Table 5.10 shows the percentage of household members' educational attainment by sex, grade, age and community. A significant proportion of household members have never enrolled at school.

In Eku, about two thirds (62%) of household members have never been to school compared to about a third (32%) in Domaa and about a fifth (19.8%) in Kokodo. The proportion of household members in Domaa that have completed schooling is 16.6%, while Kokodo which has the least proportion of never enrolled has only 3.4% of its members with completed schooling. Evidently, being a predominantly fishing and farming community, Eku has its members with the least educational attainment, with about two thirds of households members never enrolled and 5.2% completed schooling. Kokodo with the least never enrolled had the least school completers (3.4%), this could be the result of drop out as children progress through the grades.

Of the 68 male household members who have completed schooling, a greater proportion (45.6%) is within the ages of 41-90 years, compared to 56 females with a majority of completers (37.5%) within the age group 26-40 years. Therefore, among the age groups, females complete schooling at a younger age than males, but have overall lower school completion than males. This could be probably explained by the age of entry - it appears boys enter schooling later than girls, but once enrolled boys are more likely to stay on till completion. This pattern of school completion could influence schooling decisions and choices of boys and girls.

Table 5.10: Percentage of household Members' Highest Educational Attainment by Sex, Age, Grade and Community

Age	No education	Pre-school	Primary /grade 1	Primary /grade 2	Primary /grade 3	Primary /grade 4	Primary /grade 5	Primary /grade 6	JSH /grade 7	JHS /grade 8	JHS /grade 9	completed	N/A	Total
Male														
1-3	9.4	8.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.5	3.0
4-5	6.3	27.4	NA	0.9	NA	NA	NA	NA	NA	NA	NA	NA	2.6	4.8
6-15	18.8	59.4	84.1	67.5	37.7	70.9	53.3	44.8	21.9	23.1	10.6	NA	47.4	43.8
16-18	3.1	1.7	4.3	16.7	22.1	8.9	33.3	33.3	26.0	25.6	8.5	7.4	10.5	12.1
19-25	4.9	0.6	1.2	2.6	8.2	5.1	4.4	4.6	9.6	25.6	6.4	13.2	0.0	5.2
26-40	16.1	0.0	4.3	4.4	12.3	6.3	2.2	8.0	16.4	7.7	24.5	33.8	5.3	10.5
41-90	41.5	2.3	6.1	7.9	19.7	8.9	6.7	9.2	26.0	17.9	50.0	45.6	23.7	20.5
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100
N	224	175	164	114	122	79	45	87	73	39	94	68	38	1,322
Female														
1-3	5.4	5.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7	2.4
4-5	1.1	27.6	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8	3.7
6-15	9.7	56.4	79.7	60.2	35.9	68.8	69.2	45.8	37.7	29.8	8.6	`14.3	24.5	37.9
16-18	1.9	0.0	0.8	9.7	23.1	10.4	13.5	22.9	14.8	29.8	14.3	5.4	9.4	8.4
19-25	2.7	2.6	2.3	4.3	9.0	3.9	9.6	6.3	13.1	4.3	5.7	28.6	3.8	5.5
26-40	32.9	4.5	7.0	17.2	19.2	10.4	3.8	16.7	21.3	27.7	38.6	37.5	32.1	21.4
41-90	46.4	3.2	9.4	8.6	12.8	6.5	3.8	8.3	13.1	8.5	32.9	14.3	20.8	20.6
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100
N	371	156	128	93	78	77	52	96	61	47	70	56	53	1338
Community														
Eku	62.0	0.4	3.5	7.4	11.4	0.4	0.4	0.9	1.7	1.7	0.4	5.2	4.4	100
Domaa	32.0	1.1	5.0	1.1	5.0	2.2	0.6	6.6	2.8	3.3	21.0	16.6	2.8	100
Kokodo	19.8	3.4	16.4	1.7	1.7	6.9	0.9	7.8	8.6	5.2	22.4	3.4	1.7	100

N=526, Number of household members=2,659, Missing cases=10

NA= Not Applicable

Source: Field Data, 2008

There are more never enrolled female (351) household members than males (224). However the proportion of never enrolled school age children between ages 4-15 years is represented by more males (25.1%) than females (9.8%). Also, the proportion of household members by gender who have attained grade 6 is almost the same for male (44.8%) and female (45.8%). However beyond grade 6, this proportion declines for both male and female.

This pattern of educational attainment where fewer household members progress through to higher grades has a potential disincentive to a household's investment in education. This is because recurring poor educational attainment could lower the interest of some households in education and thus favour to opt out of schooling or a search for alternative providers of education.

Besides, if household members continue to have lower educational attainment, this may lead to lower aspirations particularly among children due to lack of school completers in their communities who could serve as role models. Given that the private schools are generally perceived as providing better quality education (Addae-Mensah, 2000), if the lower attainment in the study communities comes from mainly public school children, this might fuel even the poor's interest in private provision.

 Among the school going age children (4-15years), the proportion of never enrolled is greater among males (25.1%) than females (10.8%). However, with the varying but significant proportion of never enrolled household members across communities, the large proportion of females with higher educational attainment relative to males is striking as it contradicts findings in Ghana. The GSS (2005a) found that more males (25%) than females (21.7%) completed Middle/Junior High School in the district. But the fact still remains that in the three communities, achieving 'meaningful' access still appears be a far off cry as a significant proportion of children of schooling age 4-15 years (about 17%) are still not in school, while the majority have failed to complete the nine year basic education. This study will explore the considerations of household school choice decisions.

5.4.8 Educational attainment by main occupational activity of household members

The level of social and economic development of a particular area hinges on the quality of the labour force. Thus, a society characterized by a large proportion of people with no education, or with a small proportion with formal education is often associated with a limited skilled labour force (GSS, 2005b). Since progress and innovation in society is achieved with a well educated skilled labour force, comparing educational attainment by household members in the rural communities with their main occupation is a step towards understanding the role education plays in locating household members into different occupations. Table 5.11 shows educational attainment by occupation of economically active members of the household. The professional groups are mainly those with post-basic (e.g. Senior High school) and tertiary education and are mainly teachers and nurses. However, some basic education graduates teach in pre-schools in rural areas. Due to the relatively high level of educational attainment required to enter the professional occupational group, only a few constituting about 2% and 1% of males and females respectively are professionals in the study communities. Clearly, this is a reflection of fewer job opportunities in these areas which require higher level of qualification.

Generally, a greater proportion of males (23.1%) and females (36.8%) of the economically active members of the households is engaged in elementary unskilled labour such as agriculture and petty trading activities. Among those with no education, over two thirds (70.4%) of females are unskilled labourers, while a little over half (51.8%) are males. Surprisingly, elementary unskilled economic activities continue to constitute the major occupation even with household members who have completed education. About half of males (55.4%) and about 39.2% of females who have completed basic and elementary schooling are engaged in elementary unskilled labour activities. These groups of males and females might have completed schooling but probably do not have the requisite skills in numeracy and verbal abilities to enter the secondary or tertiary sectors of the economy. Indeed, if it is argued that educational attainment is supposed to equip individuals to engage in skilled labour activities, then the large proportion of school completers in elementary unskilled occupation in these rural communities could serve as a great disincentive to poor households that intend to invest in education with the view of entering into professional skilled occupation.

Table 5.11: Educational attainment by occupation of economically active members of the household

	No education	Pre-school	Primary /grade 1	Primary /grade 2	Primary /grade 3	Primary /grade 4	Primary /grade 5	Primary /grade 6	JSH /grade 7	JHS /grade 8	JHS /grade 9	Completed	N/A	Total
Male														
Professional	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.1	10.8	0.0	1.9
Technician, Associate professional	1.3	0.0	1.9	0.9	4.1	2.6	2.2	3.4	5.5	10.5	12.8	13.8	0.0	3.6
Clerk	0.9	0.0	0.6	0.0	0.0	0.0	0.0	1.1	0.0	5.3	3.2	3.1	0.0	0.8
Elementary unskilled occupations	51.8	1.1	8.8	10.8	22.0	12.8	4.4	8.0	34.2	15.8	37.2	55.4	31.3	23.1
Retired	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.2
N/A	46.0	98.9	88.8	88.3	73.2	84.6	93.3	87.4	60.3	68.4	27.7	15.4	68.8	70.3
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100
N	224	175	160	111	123	78	45	87	73	38	94	65	32	1,305
Female														
Professional	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	11.4	2.0	0.0	0.8
Technician, Associate professional	1.9	0.0	0.0	0.0	2.6	2.6	0.0	2.2	5.4	12.5	0.0	7.8	0.0	2.0
Clerk	1.1	0.0	0.8	0.0	0.0	0.0	0.0	1.1	1.8	0.0	11.4	5.9	0.0	1.4
Elementary unskilled occupations	70.4	10.4	12.6	26.4	29.5	19.5	9.8	21.7	33.9	14.6	44.3	39.2	51.9	36.8
Retired	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
N/A	26.1	89.6	86.6	73.6	67.9	77.9	90.2	73.9	58.9	72.9	32.9	45.1	48.1	59.0
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100
N	371	154	127	87	78	77	51	92	56	48	70	51	54	1,316

Source: Field Data, 2008

Even though it was argued earlier on in this section that the lack of job opportunities for those with completed schooling could be responsible for many school completers in elementary unskilled economic activities, but it could also be that these school completers have not acquired the requisite verbal and numeracy skills to enter the service and secondary sectors of the economy. This study would explore the importance of household occupation on their schooling decision and educational expenditure.

5.5 Economic profile

5.5.1 Household durable goods
The ownership of durable consumer goods by households especially in the rural communities serves as an indicator by which the economic well being of households can be assessed (GSS et. al, 2004).

Table 5.12: Percentage of households possessing durable consumer goods

Household Characteristics				
Percentage of households possessing durable consumer goods				
	Community (%)			
	Eku	Domaa	Kokodo	Total
Household durable goods				
Bed	88.3	93.6	89.7	90.4
Table	82.2	96.8	89.7	89.0
Stove/Cooker	8.3	11.8	5.1	8.8
Refrigerator	20.9	31.0	20.5	24.3
Fan	25.2	39.0	29.1	30.9
Wall clock	37.0	63.4	60.7	51.4
Wrist Watch	63.5	81.3	74.4	72.1
Sewing Machine	27.0	46.5	29.9	34.5
Radio	55.2	85.6	76.9	70.6
Television set	22.6	48.1	25.6	32.2
Telephone	1.3	4.3	8.5	3.9
Mobile Phone	35.7	42.2	35.0	37.8
Computer	0.4	4.8	0.0	1.9
Bicycle	14.3	19.3	12.8	15.7
Motor Bike	0.0	3.2	4.3	2.1
Car	3.9	12.3	6.0	7.3
Books other than school books	65.7	81.8	50.4	68.0
Light source for home work	72.9	92.0	45.3	73.5

Source: Field Data, 2008.   Figures are percentages of household owning durable goods, N=521

Households were asked to provide data on the ownership of dwelling assets including bed, table, refrigerator, stove/cooker, books other than school books and telephone. These various household assets are useful in determining the availability of food storage

facilities, basic household furniture, supplementary educational materials, access to media and mode of transport. Table 5.12 shows the percentage of households possessing various durable consumer goods by community. Nine out of every ten households indicated that they own a bed (90.4%) and a table (89.0). Even though this large proportion of households owns these two items, there still remains about 10% who do not have this basic household furniture. These are probably households in the lowest decile and also the poorest. With regards to cooking and storage of food, only 8.8% indicated the use of cooker or stove. This is actually not surprising considering that energy for cooking (i.e electricity and LPgas) using a cooker or stove is not only readily unavailable but can also be expensive. Almost a quarter of households have refrigerators (24.3%). However, Eku and Kokodo reported about a fifth compared to Domaa which had almost a third of households owning refrigerators. Ownership of radio set, television set, telephone and mobile telephone is useful in assessing household access to media and by extension information and communication. About two thirds (70.6%) of all households own radio sets, even though Eku has a bit more than half of households (55.2%) possessing a radio set. While about a third of all households (32.2%) owned television sets. Across communities, almost about half of households (48.1%) in Domaa, a quarter of households (25.6%) in Kokodo and a fifth of households (22.6%) in Eku indicated ownership of television sets.

Even though a small proportion of households (3.9%) reported ownership of a telephone, more than a third of all the households (37.8%) own a mobile phone, with a greater proportion (42.2%) in Domaa. In the areas of transport, a small proportion of households owned a bicycle (15.7%), a motor bike (2.1%) and a car (7.3%) and this could probably be because of the high cost involved in purchasing them or that some households do not generally have to travel a long distance. Household ownership of a computer, books other than school books and a light source for home work indicates the extent to which children's schooling can be sustained. Only about 2% of households own a computer, with about two thirds of households owning books other than school books (68%) and having a light source for home work (73.5%), but there still remain about 30% of households which do not have lights for home work and /or own books apart from school books. Clearly, a significant number of households do not have these basic household goods which are reflections of their low economic and social status. Given that at least one out of every ten households do not have bed or table, while at

least a third (32%) do not have books other than school books and light source for homework, children from such households are more likely to face difficulties with their school work. However, in the midst of economic deprivation, some household have assets and these are possibly the households that have the capacity to meet the educational expenses of their children, particularly in the private school.

5.5.2 Household sources of livelihood and income

The economic activities and social networks of households in the rural areas are useful in determining households' sources of livelihood and income. Table 5.13 shows the percentage of households' sources of livelihood and income. Three major economic activities and livelihood strategies were identified: own farm activities, petty trade or business and casual labour in agriculture. Among the three sources of income and livelihoods, own farm is a major contributor with more than two thirds (68.9%) of households engaged in farming activity and with many households producing at the subsistence level. Across communities, there are variations in the proportion of households in farming activities. Data indicate that 94.9% of households in Kokodo, 78.6% in Domaa and 47.8% in Eku derive their livelihood and income from own farm activities. The relative small proportion of households engaged in their own farming activity in Eku, compared to the other communities, could be explained by another major occupation of fishing in the area. Given that own farm agriculture or fishing is rated as the occupation of the poor, households in such occupation may be constrained in their ability to choose private schooling.

The second major economic activity is petty trade or manufacture. More than half (54.3%) of households, within and across communities are into petty trade or manufacture. However, casual labour in agriculture, which is the third most important source of income and livelihood indicate almost a fifth of households (18.6%) depending on it for their livelihood. Across communities, the proportion of households in casual labour in agriculture is unevenly represented, with a majority in Eku

Table 5.13: Sources of household livelihood and non-employment income

Percentage of sources of households' livelihood and non-employment income

Household Characteristics	Community (%)			
	Eku	Domaa	Kokodo	Total
Sources of Livelihood and Income				
Own farm activities	47.8	78.6	94.9	68.9
Casual labour in agriculture	30.0	4.3	17.9	18.4
Casual labour (non agriculture)	6.5	2.1	3.4	4.3
Wage/salary employment in agriculture	0.0	1.1	6.8	1.9
Wage/salary employment (non agriculture)				
Petty business/trade/manufacture	3.5	10.2	4.3	6.0
Major business/trade/manufacture	49.1	59.4	56.4	54.3
Collection/foraging	1.3	9.1	3.4	4.5
Charity/alms	0.9	1.6	0.0	0.9
Safety net/poverty schemes	0.4	2.1	0.9	1.1
	0.0	0.0	0.0	0.0
Interest on income/property/rent on land				
	0.0	1.1	0.0	0.4
Public transfers/pensions/child support grant				
Private transfers within				
	1.3	0.5	0.0	0.8
Private transfers/remittance from abroad	2.2	0.5	2.6	1.7
	1.3	0.0	0.0	0.6
Social network				
Yes	10.4	6.6	5.8	22.8
No	33.4	28.4	15.4	77.2
Support from social network				
Cash	19.4	26.2	18.4	67.6
Kind	31.1	1.0	3.9	35.9

Source: Field Data, 2008.   N=521

(30%) compared with Domaa (4.3%) and Kokodo (17.9%). With about a third of households in Eku and almost a fifth of households in Kokodo depending on casual labour in agriculture for their livelihood, there is critical concern about households' economic survival during the dry seasons when their labour may not be required on the farm. Such households risk severe economic hardships. Therefore, compared with those in petty trading that are able to have some income through their daily sales, those depending on casual labour are among the poorest and therefore more likely to have difficulties in meeting children's educational expenditure.

None of the communities had safety nets or benefit from poverty schemes, while interest on income or property, private transfers within and from abroad was insignificant as indicated (see Table 5.13). Furthermore, households were ask to indicate whether they have social networks (friends, relatives and well wishers) that regularly

support them either in cash or kind. Even though a greater proportion of households did not have existing social network (77.2%), about a fifth (22.8%) indicated they have a social networks that support them in cash (68%) and also in-kind by providing them with food stuffs and clothing (36%). While the proportion of households with social network is small (22.8%), the fact that 68% of household with social networks received cash for schooling expenses could have an influence on their ability to pay for school expenses and hence participate in school choice. The greater proportion of households in Eku with a social network (10.4%) might be explained by financial and material support from relatives and friends who embark on migrant fishing expeditions in the western part of the country. Therefore, the likely impact of household characteristics including occupation and social network on school choice and educational expenditure will be explored in later analysis.

5.6 Summary

The Mfantseman district is one of the poorest districts in the Ghana, with about 60% of the population living below the poverty line of a dollar per adult person per day (GSS, 2005a; MDA, 2006). Evidence from the survey of households in the three study communities that have already enrolled their children in school also confirms the extent of poverty. Several of the households possessed no assets, have no or few years of education and depended mainly on subsistence agriculture. Beside, only about a fifth of the households had social network of friends and relatives that supported their children's education.

Therefore, for many of these households access to education came to them at a greater cost than households that had regular income, assets or a social network, particularly in LFPSs where households were confronted with relatively high non-discretionary expenditures. However, in spite of the poverty conditions of the study communities, there are a few that have completed schooling and also have relatively stable income and assets. This category of households have the capacity to pay for the cost of education and therefore more able to enrol their children in a fee paying school of their choice, especially if they perceive that school to be of better quality than the other schools known to them.

The foregoing descriptive analysis has provided a detailed contextual background of the socio-economic conditions of households in the study communities. The emerging issues raised in the summary of this chapter provides a basis for exploring how poor households explain their school choice decisions and whether they really receive what they think they are buying from the low fee private schools. In addition, the household direct costs of public and private schooling are examined to understand how they compare and also might influence access and choice of schooling. Finally, income and expenditure of the study LFPSs are examined to determine the extent to which they might be financially sustainable in future.

Chapter 6: Analysis of findings I
How do poor households explain their schooling decisions?

6.1 Introduction

Evidence from developing countries points towards the increasing popularity of low-fee private schooling amongst the poor in rural areas (Sawada and Lokshin, 2001; Tooley and Dixon, 2007b). As indicated in chapter five, the relatively low ratio (3:1) of public to private schools in the district under study is an indication of the existence of the supply of and demand for private schooling. However, whether it is the poorest who access these LFPSs, as argued by Tooley (2005; 2009), Tooley and Dixon (2007a) and Srivastava (2008a) requires further investigation. This is because poor households' choice of schooling is inextricably linked to their ability to pay (Lewin, 2007a; Harma, 2008), and also to other contextual factors such as information about the characteristics of the public and private schools in rural areas (Srivastava, 2006; 2008a).

This chapter examines the schooling decisions of the poor in the three rural communities under study in Mfantseman district. The analysis begins by testing the hypothesis that school choice in rural Mfantseman was not affected by households' socio-economic conditions. If so then affordability is not a constraint. This is followed by additional insights into how households explained their choices. Data derived from interviews with household heads in the lowest income group are used to explore the characteristics of those who chose to enrol their children in private school only; those who opted for public school only; and those who decided on a mixture of both private and public schools (the combined option) – and how they explained the choices they made. Finally, the chapter summary pulls together some issues emerging from the analysis before drawing some conclusions.

6.2 What are the main determinants of household heads' school choice decisions in rural Mfantseman?

Households involved in school choice fall into one of the three mutually exclusive groups at a point in time, that is, public, private, and public and private (the combined option). Table 6.1 lists the coefficients, which were estimated using multinomial regression analysis. The results are reported in 'relative risk ratios' (RRRs) for each

explanatory variable, which indicate the relative likelihood of a household type with a given set of characteristics (when compared to the reference category for each characteristic) choosing private school or the combined school option compared to choosing public school, controlling for all other explanatory variables in the model.

The statistical results show that if further children were to be enrolled in school, the relative likelihood of the household head enrolling some children in public and private (combined option) increased by about two fold compared to enrolling in public school only. Evidence on the sibling effects on schooling in developing countries shows that the number of children in the household has a significant impact on demand and choice of schooling decisions such that, children with more siblings are less likely to enrol in school (Kingdon, 1996; Colclough et al., 2003; Harma, 2008; Rolleston, 2009). Poor household interested in private schooling but unable to afford the cost for all their children may choose a combined school option.

The household's direct schooling expenditure per child is statistically significant on household school choice, after controlling for the sex of the child. The results show that a rise in education expenditure per child by Gh¢1 (about US$1) increases the relative likelihood of the household head selecting either private school only or a combination of public and private school as compared to public school only. Since an increase in education expenditure is likely to be correlated with household income and private school choice (Harma, 2008; Lewin, 2007a), an increase in income increases the choice of schooling options for the household and not just for one child. However, this statistical result should not be interpreted to mean the ability to afford the cost. This is because interviews with a sample of household heads in the lowest income group that had children exclusively in private school revealed that enrolling them in Low-Fee Private School (LFPS) implied a great sacrifice to the household. This is consistent with similar findings in rural India where the poor that enrolled in LFPS had to cut expenditure on household essential items such as food and health (Harma, 2008). However, the willingness of households to expend more on schooling is an indication of the importance they placed on education (Bray and Bunly, 2005).

Table 6.1: Determinants of household type school choice options at the basic level in rural Mfantseman

Outcome variable	Private only households		Public and private households	
School choice	*Choice = 1*		*Choice = 2*	
	RRR	*Z Stat*	*RRR*	*Z Stat*
Explanatory Variables				
Household heads characteristics				
Gender (female = 1)	0.77	-0.28	0.92	--0.15
Age in years	0.93	-3.45***	0.98	-1.26
Education in years	1.22	4.59***	1.12	2.91***
Religion (Christian = 1)	1.70	0.82	2.41	1.63
Household characteristics				
Social network	1.58	1.02	0.97	-0.06
Average schooling	1.07	6.29***	1.05	4.51***
Expenditure				
Distance in km	0.88	-1.35	0.96	-2.66***
Occupation				
Household agricultural activities	1.18	0.39	2.86	2.44***
Casual agricultural labour	0.78	-0.43	1.58	0.97
Casual non-agricultural labour	0.52	-0.84	1.18	0.27
Petty trade/manufacture	1.26	0.68	1.87	2.06**
Major trade/manufacture	3.67	2.11**	1.95	1.12
No. of children in school	0.75	-1.63	1.86	5.10***
Sex of child (female =1)	0.85	-0.018	0.98	-0.04

Observations = 376

Pseudo R^2 = 0.2753

Notes: Base outcome – public only, (p. <0.01)***, (p. <0.05)**, (p. <0.10)*.

Among the various occupations on which households depended for their income and livelihood, those engaged in self-employed agricultural activities show that this had a positive impact on selection of both public and private schooling when compared to households not in that occupation; and the likelihood of the household head choosing this option relative to public school only increases by about threefold. Given that this category of households are considered to be the poorest due to the low and erratic nature of their earnings (see chapter five), such circumstances would pose a significant constraint on their capacity to enrol their children in an LFPS; consequently they chose combined school option.

The results for households engaged in trading activities when compared to households not in that occupation reveal an interesting pattern – petty trading increases a household's likelihood of selecting both public and private schools relative to public school only by about twofold. Moreover, in respect of households engaged in a major trading activity, the relative likelihood of choosing a private school rather than a public school only increases by about fourfold. Household members engaged in petty trading were more able to support the schooling of their children than were their counterparts not working in this sector (GSS, 2003).

In the case of rural Mfantseman, in the communities under study, households that engaged in petty trading were able to earn a small daily income, which contributed to meeting their children's education costs. Such household were likely to select both public and private school. Moreover, households engaged in major trading or manufacturing enterprises – such as palm oil processing, buying and selling pineapples, or the production and distribution of cassava flour– were most likely to fall into the highest income quintile and therefore capable of meeting the costs of private education. As a result, households engaged in major economic activities were about four times likely to choose private school only compared to public school only. This is consistent with evidence from the literature showing that high-income households have a greater chance of enrolling their children in private school than do low-income households (Goldring and Philips, 2008; Schneider et al., 1996).

The age of the household head is significant but negatively associated with the selection of private school, indicating the likelihood of older household heads compared to

younger household heads choosing private school only relative to public school only. Interview data revealed that older household heads (over 40) perceive public schools to have better trained teachers citing prominent people in the past that graduated from public schools in their communities as reason for their decision. Harma (2008) also found that in rural Uttar Pradesh, older parents were more likely to choose public only rather than private school only.

More importantly, household heads' years of education significantly affected their school choice. An additional year of education increases the relative likelihood of private school choice by 1.2 times, while the likelihood of choosing the combined school option is increased by 1.1 times. What these results suggest is that more highly educated household heads were more likely to choose private school only or combination of public and private rather than public school only. Interestingly, in the communities in which this study was conducted, only 13 per cent of adult household members between the ages of 19 and 25 years had completed their basic education. However, about 34 per cent of those between the ages of 26 and 40, and 46 per cent of those between the ages 41 and 90 had completed their schooling (see Table 5.10).

What is clear from the results of this study is that if a household head was educated, their sense of giving their children a good education was stronger; and if they perceived that the private school offered good value, they were more likely to opt for it. Similarly, Goldring and Philips (2008) indicate that in the United States, parental educational and household income levels are positively correlated to the choice of private school. Studies in developing countries, including Al-Samarrai and Peasgood (1998), and Glick and Sahn (2000) have also found that the educational level of parents has a positive influence on their children's access to schooling. Educated household heads or parents tend to appreciate more highly the value of education, and are therefore more willing to spend money on it.

The distance a child has to travel from home to school is statistically significant in explaining school choice in respect of choosing the combined school option compared to public school only. The results show that for each kilometre a household's residence is located further away from school, the relative likelihood of selecting the combined school option compared to public school only is reduced by 0.95 times. Previous studies

in Ghana (Chao and Alper, 1998) and in other developing countries (Tooley, 2009; Gulosino and Tooley, 2002) have also found that distance from school is correlated to household demand for schooling and, for that matter, choice of school type. Since private schools are often established in areas where public schools already exist (Harma, 2008), where the distance to the former is further than the latter, households may tend to choose public schooling and vice versa.

In short, the statistical results reject the hypothesis that the school choice of households in the sample was not affected by socio-economic factors. For example, the results show that educated household heads and households with better social and economic opportunities are more likely to choose private schooling compared to their counterparts who are not so well off. This finding is not surprising, as a number of studies (Goldring and Philips, 2008; Betts, 1999; Smrekar and Goldring, 1999) have found socio-economic factors to be correlated with household choice of private school. Accordingly, household school choice patterns in the study communities mirror the manner in which the rich and those with social capital in urban and peri-urban areas act in terms of school choice. Yet, this result notwithstanding, a minority of the poor households in the sample made such a school choice. The next section engages with this group of households through interviews in order to understand how they explained their school choice decisions.

6.3 Explaining the school choice decisions of the poor: the views of household heads

In analysing household schooling decisions, most studies[17] have employed rigorous quantitative analysis that identifies the statistically significant factors. However, the deeper meaning of these factors can be gained through engaging with the 'voices' of those responsible for these decisions. Therefore, the three categories of household head in the lowest income group who had children in school were interviewed on their school choice decisions. These household head interviewees were composed of 14 household heads that chose public school only, 13 that chose private school only and finally 11 that

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[17] A number of studies, including Lillard and king (1984), Gertler and Glewwe (1998), and Al-Samarai and Peasgood (1998), have employed a single-period model of household schooling decision-making; whilst Mason and Rozelle (1998), and Sawada and Lokshin (2001) use a more sophisticated model that considers schooling decisions over time.

selected both public and private school. The results of the interviews are discussed in terms of four main themes: examination results, school infrastructure, discipline and commitment, and the motivation of the household head.

6.3.1 Examination results

Household head interviewees who had enrolled their children in public school only indicated that they actually preferred private school on account of its better performance in examinations; in all, 9 of the 14 interviewees who had chosen public school only indicated their preference for private school for this reason. These were households that had a preference for private schooling but could not afford to pay the fees and other charges. As a result, they had settled for public schooling, which was fee-free.

However, five of the interviewees that choose public school only indicated that they had selected the public school because it had better-trained teachers, arguing that prominent people from their communities had gone through the public school system in the past. This also explains the statistical results, which indicate that older household heads are more likely to choose public than private school. These were people over the age of 40 years who perceived the activities of private schools as profiteering, noting that if children in public school studied hard, they were just as likely to pass their exams.

Indeed, this raises the question of why pupils in rural public schools appear or are perceived not to be conscientious in their studies compared to their private school counterparts. Analysis of interviews with teachers and parents shows that while the former blamed parents for not providing their children with their schooling needs, accusing them of taking little interest in the affairs of the school, some parents equally accused public school teachers of chronic absenteeism, lateness and failure to teach their children. Clearly, the poor performance of pupils could be an indication of a lack of motivation within the public school system arising from the combination of an absence of professional discipline amongst the teachers, the poverty of some households, and lack of child discipline. However, whatever the reason, the outcome affects the decisions households make in terms of their choice of school.

Just like most household heads who enrolled their children in public school only, those interviewees who selected both public and private schools indicated that private schools did better in the final examinations in comparison to public schools. This group can be referred to as 'strategic choosers' because they actually wanted private schooling for their children but could not afford it. Therefore, they enrolled some in public school and some in private school in the hope that the household would reap the benefits of higher quality private education, as measured by examination results. The following comment from a female household head illustrates this view:

> *The private schools do better than the public schools ... When we look at all the children who sit for the JHSC [Junior High School Certificate] exams, it is only the children from the private schools who pass the exam... We know because we do not see the other children moving on to SHS [senior high school]. Even two of my own children who attended public school couldn't pass the JHS exam to enable them to continue to SHS.*

Therefore, the issue of examination results was crucial to household school choice decisions. This was because it was examination results that determined whether the child could proceed to post-basic education. As a result, when a household made different school choices for different children, it tended to create better opportunities for those who were enrolled in private school. Accordingly, a greater proportion of household resources were devoted to supporting children in private school through the payment of extra classes and purchase of supplementary books, while those in public school received less support. As Goldring and Philips (2008), and Bosetti (2004) argue, having chosen a private school for their child, parents invest money and time in them in a bid to prove that they have made the right choice. Consequently, the private school child is more likely to have better opportunities and life chances, while the public school child is condemned to failure.

The school choice behaviour of interviewees was consistent with the statistical results (see Table 6.1); that is, the number of children a household actually had in school significantly affected its selection of the combined option relative to choosing public school only. Table 6.2 shows percentage of children in school by school choice option.

Table 6.2: Percentage of children in school per household by school choice option

School choice option	Number of Children in School per household							
	1 Child	2 Children	3 Children	4 Children	5 Children	6 Children	7 Children	Total
Public only	21.2	31.3	22.9	13.5	9.0	2.2	NA	100
Private only	48.8	23.3	16.3	6.2	5.4	NA	NA	100
Public and Private	NA	16.8	29.0	35.5	15.9	1.9	0.9	100

Source: Field Data, 2008.   Figures are row percentages

Table 6.2 shows that nearly half (48.8%) of the households that selected private school only had just one child in school and the proportion of household choosing private school only reduces as the number of children in the households increase. On the other hand, the proportion of households choosing both public and private schools increases as the number of children in the household increases. This rise continues up to a point and then declines. What the statistical analysis shows is that households with more than one school-age child and interested in private education were more likely to enrol some in public and some in private school. In effect, households with just one school going age child had a greater ability to choose private schooling than did their counterparts with more than one child.

Again, even though the statistical results indicate that the sex of the child was not significant (see Table 6.1), interview data show that in deciding who should attend private school, nearly all interviewees chose the oldest sibling; arguing that while at school, an older sibling would be able help their younger siblings in public school with their studies and also support them financially after they (the older sibling) had completed their schooling. This is consistent with the results of other studies, including Harma (2008) and Srivastava (2006) which have shown that a child's rank in the household was significantly associated with the first child being enrolled in LFPS.

In addition, interviewees who opted for private school only said that they were looking for an education that enabled their children to read, write and communicate in English. Moreover, they also had aspirations for their children to gain access to post-basic education, arguing that the best way of achieving this was through private schooling.

The following excerpt is illustrative of why interviewees chose fee-paying private school:

> *The job I do does not bring me a regular income, but the elders say if you like cheap things you will end up eating worms... Even though public school is free, some children still do not attend school. I don't want to take the line that because it is free, I should send my children to public school. My goal is for my children to end up well, and the best way of achieving that goal is what I will pursue [ie private school].* (A female household head)

This interviewee's circumstances can be described as 'transient poor' because she was a petty trader without a regular income. All household head interviewees who enrolled their children in private school only indicated that they made the effort to keep them in school due to the greater aspirations they had; therefore, they were willing to go to great lengths, even if the cost to the household was substantial. Aspiration without capacity to pay school fees and other charges will not sustain a child in private school for the whole basic education cycle. Nevertheless, the perception of better examination performance together with higher aspirations fuelled household interest in private schooling.

6.3.2 School Infrastructure

The state of a schools' infrastructure was another important theme that emerged from household heads who chose private school only and the combined option. Interviewees argued that education should bring benefits, pointing out that what mattered most about a school was whether learning took place. In comparing public and private schools in the community, interviewees acknowledged the poor state of private school infrastructure compared to the public schools that possessed standard school buildings with adequate seating, desks and well-ventilated classrooms. They emphasised that they were aware of the poor state of private school infrastructure and even the quality of the teachers, but what mattered most to them was whether learning was effective, and they judged this on the basis of examination results. The following contribution from a 40-year-old male household head and private chooser highlights this view:

> *Just last year [2007], Domaa Anglo [a public school] entered 30 candidates for the BECE; only five passed, and in Domino [another public school], only two passed. But Shambu [one of the private schools in the community] topped all the basic schools.... If we look at Shambu Private School, you will realise that it is not up to standard... I mean, looking at the school structure,*

you will find that it is not a nice place to send your child, but then learning takes place... If I am learning under a tree with the sun shining directly on my head or even beaten by the rain, and still benefit from a good education, I will prefer that to learning in a multi-storey building which has air conditioning in all the classrooms but brings no benefit, or very little.

Several interviewees who had chosen private schooling noted that even though they had temporary wooden structures, what mattered most was that their children passed the Basic Education Certificate Examination (BECE).

6.3.3 Discipline and Commitment

Interviewees indicated that lack of discipline among pupils was responsible for the poor examination results in public schools, and blamed the teachers for failing to instil discipline in the children under their care. The following observation by a household head with children in both public and private school reflects this view:

During our time, public schools used to be good and they used to teach a lot...but these days, the young teachers we have don't care. They treat children's behaviour at school with apathy and they think that 'the children will reap what they sow.' After all, at the end of the month, the teacher will still receive their salary. (A 52-year-old female household head)

As a result of this perceived situation, several household heads with children in both public and private school indicated that they would have preferred a private school for all their children but for its relatively high cost. Of the 12 interviewees who had selected the combined option, 10 indicated their willingness to move all their children from public to private education; but because they could not afford to pay the private school fees and other charges for all the children in the household, they had elected to enrol at least one child in private school with the intention of moving those in public school into private education if there was an improvement in their income.

Furthermore, interviewees noted that private school heads were committed to their work and showed an interest in the welfare of their pupils by visiting parents at home to share with them their children's progress at school. They also mentioned that when a child did not attend school on a particular day, the head teacher went to the pupil's home to discover the reason and often succeed in getting the child to return to school. The

following comment from a 36-year-old household head with children in both public and private schools reflects this view:

> *A private man who has set up his school and is incurring expenses has an eye on the children… If a child does not go to school for a day, the teacher visits their home to find out why they were not in school, and ensures that they report to school the next day. That is what I don't mind paying for my child to have a good education.*

Private schools in the communities under study showed a lot more interest in their pupils' progress. This may be because their survival and sustainability of these LFPSs depended on attracting more households that would pay school fees and other costs. Thus, private schools valued interacting with parents as this was a way of showing their commitment and ensuring high participation.

However, it is important to note that the strategies adopted by private school heads in rural communities are not alien to the public school system. Public schools in rural areas prior to independence maintained close links with community members and actively participated in community activities. As Bame (1991: 68) puts it, *'The town or village teacher in those days was a letter writer, reader and a counsellor not only to the local chief but to all members of his community.'*

 Interviews with public school teachers revealed that they hardly visit or participate in the activities of the communities where they live. As a result, households in the rural areas under study perceived the activities of private schools as a genuine attempt to provide high quality education services. Clearly, this influenced the school choice decisions that households made.

Household head interviewees said that they did not consider public school teachers to be conscientious in their work, citing two reasons for this claim. Firstly, following a break time, teachers often failed to return to the classroom when the allotted time was up, but allowed the children to continue playing until it was time for pupils to go home; while their private school counterparts adhered strictly to lesson times. Secondly, they had observed some teachers drinking alcohol during school hours, while others arrived at school late or failed to report for duty at all. In the words of one female household head who had children in both public and private schools:

Sometimes, you will find some public school teachers going to school around 11 a.m. and by the time the teacher gets there, the pupils might have been fighting all morning... The teachers leave the children in the classroom and go on drinking leaving these children unattended...someone who is drunk, what can he teach? I found this kind of behaviour disturbing and so I decided to send some of my children to the private school.

Households that had selected both public and private school indicated that when they compared public school with private school, they found the cost of the latter more of a burden. Whilst acknowledging that private school choice was accompanied by costs, interviewees argued that given the current poor state of the public education sector, private schooling was a preferable alternative. A female household head who had children in both public and private school expressed her frustration thus:

Why is it that the government has given every parent the chance to send her child to school free of charge? I say I don't want that, but instead I will send my child to a private individual who has established his school to make a profit, and pay fees... Ideally, wouldn't it be better for all of us to support the government's free education policy for our mutual benefit...? But if I say I do not want that but want to go to a private school and pay fees, then you need to know the reason. When the children go to [public] school, they don't teach them anything at all.

The above comment re-emphasises the point that households might have been poor, but fee 'free' education without evidence of teacher discipline and commitment to pupils' education in these rural public schools was not sufficient reason to induce parents to enrol their children in public school.

Furthermore, interviewees identified two issues related to public school pupils and their teachers. They noted that public school children were frequently seen loitering around the village during school hours, while their teachers did what they pleased rather than teaching. In contrast, private school head teachers adopted a number of strategies that ensured teachers' commitment.

For example, in three of the private schools under study, teachers received a bonus of Gh¢1 for each day they reported to school, the total amount at the end of the month constituting about 40 per cent of their salary. In addition, head teachers regularly

monitored their staff and were quick to discipline those who failed to teach or regularly came to school late. These strategies made teachers in rural private schools more accountable and therefore more committed.

Interviewees noted that in public school, teachers were assured of their full salary at the end of each month even if they missed school for a number of days or were late for work most of the time. Interviewees argued that this did not therefore encourage teacher commitment. The following comment from one female household head with children in both public and private school highlights this view:

> *I can see that pupils in public schools are not serious; and even their teachers feel that whether they teach or not, they will be paid at the end of the month. But in the private school, if you don't teach, you will be dealt with by the proprietor.*

Household contribution to the private school in terms of payment of fees and other charges created a responsibility on the part of the school to be receptive to parents' needs. One interviewee cited an instance in which she noticed that her daughter was underachieving in class and reported it to the proprietor of the school; the class teacher was made to retake the lessons. It is important to note that, the LFPS teachers are untrained and therefore have less professional capital. As a result, head teachers of LFPSs have a lot of control over their teachers.

While interviewees acknowledged that a public school might respond to such complaints, the lack of seriousness it commonly attached to them did not compare favourably with the efficiency of the private school. It is clear that the cavalier attitude shown by some public school teachers as substantiated by head teachers and teachers (see Chapter 7) in comparison to the discipline and commitment of the LFPS swayed some of the poor in their decisions to choose private schooling.

6.3.4 The motivation of the household head

Whether a household enrolled its children in public or private school was influenced by its motive for investing in education. In exploring household school choice decisions, two motives – self-interest and altruism – related to investment in education emerged.

These two motives were relevant to the decision households made in respect of the type of school they chose for their children.

The self-interest motive for the household schooling decision was related to the head's decision to enrol a child in school with the main intention that this should benefit the household at some future date rather than the child personally. The dominant views of interviewees revealed that across all categories of household head, a school choice decision was based on the expectation that the investment in children would produce benefits would enable them to take care of them in their old age. The following excerpts reflect the self-interested views of the various categories of interviewee:

> *The reason why I have sent my children to school is because it is for my future... Education will give my children a brighter future for them to cater for me in my old age.* (Combined option chooser)

> *Spending on my children's education is like depositing money in my savings account, which I will withdraw someday.* (Private school chooser)

> *Schooling is beneficial to us parents in our old age because…if I don't send my child to school, when I grow old they will not be able to take care of me.* (Public school chooser)

The issue of social security was crucial to interviewees' school choice decisions. Therefore, from the interviewees' perspective, investing in their children's education amounted to making social security contributions that the household would draw on in future.

Interview data show that it was private school choosers who most readily demonstrated motives of self-interest in schooling decisions. Of the total of 38 household heads interviewed, 7 out of 14 who choose public school; 12 out of the 13 who choose private school; and 9 out of 11 who selected the combined option, demonstrated evidence of self-interest in making schooling investment decisions. Table 6.3 shows a classification of household heads' responses.

Table 6.3: Frequency of household heads' who are self interested and altruistic in their school choice decision

School choice	Number of interviewees	Number Self Interest	Number Altruistic
Public	14	7 (50%)	10 (71%)
Private	13	12 (92%)	9 (69%)
Combine Option	11	9 (82%)	7 (64%)

Since about 39 per cent of households in the lowest income group in my sample opted for private school only and a combination of public and private, in respect of poor rural areas, it can be inferred that although some households may be among the transient poor, because their investment in education is informed by motives of self-interest, they are willing to go to great lengths to invest in private schooling in spite of the probable high burden the concomitant expenditure will impose on them. Thus, in order to understand household schooling choice, the motives that inform the decisions of those who bear the cost of education are significant.

With regard to household heads who demonstrated altruism in their school choice decisions, interviewees across all school types indicated the desire for their children to become enlightened, disciplined and responsible citizens. They also contended that education refined and made a person unique in many ways, including mode of dress, speech and general outlook on life. The dominant view across all school types with respect to altruism was evenly distributed, 9 out of 13 households opting for private schooling only, while 7 out of 11, and 10 out of 14 selected the combined option and public school only respectively.

Moreover, interviewees noted that the contemporary world had thrown up new challenges and they believed that the young generation needed to be educated in order to surmount them. The following excerpt is an illustration of the altruistic consideration that informed an interviewee in their investment in education:

> *The greatest asset to the child is education... because the Bible says 'seek ye the kingdom of God and all shall be opened un to thee...' But in the field of education, seek ye the kingdom of education and all avenues shall be opened un to thee, because if you have education you have everything.* (A male household head and private school chooser)

Several household interviewees noted that education could be used as a tool for gaining enlightenment and liberation, emphasising that schooling created opportunities beyond the reach of those who were uneducated. Other household head interviewees were of the opinion that education gave a voice to the voiceless and functioned as a tool for empowering women in taking an active part in decision-making in society.

One female household interviewee who had children in both public and private school asserted that, *'Schooling is of great value... Esi Bronya,*[18] *for example, is a woman but thanks to education, when she stands up to speak she is like a man, and I want my girls to be like that.'*

Therefore, household heads who demonstrated self interest were more willing to invest in private education than those who acted out of altruism. However, household heads that acted out of altruism were equally distributed across school choice options.

Evidently, there was optimism amongst household head interviewees that the returns from the schooling of their children would trickle down to them in the form of income, respect and security. However, the extent to which households expected to benefit from their investment determined their level of motivation in selecting a private school. What is clear is that private school choosers are more self-interested than altruistic in their motives for investment in education (see Table 6.2). Such households may be poor, but schooling decisions are driven more by the level of self-interest or altruism rather than just the cost of schooling.

6.4 Summary

This chapter explains households school choice decisions by first exploring the factors that correlates with household school choice in rural Mfantseman. Qualitative evidence provided deep insight to some of the emerging factors.

The evidence from the statistical analysis rejects the hypothesis that school choice in rural Mfantseman was not affected by household socio-economic factors, an indication that affordability constrained poor households from choosing private schooling.

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[18] A pseudonym of prominent female politician in Ghana.

Similarly to the case with urban and peri-urban settings in Ghana, schooling choice was influenced by the child's household social and economic circumstances. With their economic and social capital, relatively affluent households in the communities under study were more able to afford private schooling, and more likely to chose private schools a finding that is consistent with the literature on school choice (Goldring and Philips, 2008).

However, the statistical results do not explain why a few poor household heads chose an LFPS even with all the economic constraints they faced. Insights from interviews with this minority show that there was a general perception that the LFPSs provided a better quality of education than did the public schools in the locality, a perception that resonates nationally (GSS, 2005; MOESS, 2006). In addition to quality of education, the perception that public schools lacked commitment and discipline compared to private schools, coupled with the higher aspirations of some poor households, strongly fuelled the interest of some of the poor in private education.

Furthermore, in order to access private school, some poor households made a strategic choice in enrolling some of their children in public school and some in private school. This is because poor households' choice is constrained by the number of school going age children and income (Harma, 2008). However, when household heads made such choices, different educational opportunities arose for different children. This has implication for family cohesion due to the inequality it creates as one child is given better opportunity than the other.

In conclusion, the statistical results have shown that, households in my sample which have poor socio-economic background are less likely to choose private school. However, for the minority poor households in the sample that choose an LFPS, the evidence from the qualitative analysis shows that their private school choice was based on rational thinking borne out of what they perceived the LFPS to offer – a better quality of education. The next chapter tests whether the perception that LFPSs offered a better quality of education than public schools in the same locality is corroborated by the evidence.

Chapter seven: Analysis of findings II
Does the relative quality of schools in rural areas explain schooling decisions?

7.1 Introduction

The qualitative analysis in chapter six indicated that household head interviewees in the communities under study who chose private schooling overwhelmingly cited the better education outcomes of the LFPS compared to the public school as their principal motivation for selecting the former. Evidence from the Criterion Reference Tests conducted by the Ghana Ministry of Education suggest that private schools in urban and peri-urban areas in Ghana provide better education outcomes than do public schools in similar environments (MOESS, 2006; GSS, 2005). However, this might not be the case in a typical rural environment owing to factors such as low quality teachers and infrastructural facilities. Accordingly, this chapter argues that the quality of education in LFPSs in poor rural settings in terms of examination and test results, and school inputs is not significantly better than their public counterparts; and that factors other than school quality fuel the interest of the poor household in private education.

This chapter employs a number of quality indicators, including examination results, test scores, the quality of teachers, pupil to teacher ratio (PTR) and the standard of school infrastructure to examine whether the perception that the private school offers a better quality of education is borne out by the reality in the communities under study. It also explores the extent to which the interaction between household and the school in a locality influences parents' response to the school.

The analysis begins by comparing public school and LFPS inputs, for example, characteristics of teachers, PTR, and infrastructure. This is followed by a comparative investigation of output − examination and test results − indicators in order to determine which school type provides a better quality of education. Secondly, qualitative data derived from interviews with teachers, SMC members and parents are examined to identify the practices that attract some households to the LFPS.

7.2 How does the quality of input into public schools and LFPSs compare?

The quantity and quality of school input is significantly related to the quality of education provision. This section compares the inputs of the public schools and LFPSs under study, taking into account the number of teachers and their standard of training, pupil to teacher ratio, types of school structure and the number of classrooms per school, by school type.

Table 7.1 shows school inputs for the three public schools and three LFPSs under study. Generally, the public schools had more and better-trained teachers. At Medico Public School, 8 of its 9 teachers had 3 year post secondary teacher qualifications. At Domino, 11 of its 15 teachers also had post secondary teacher qualifications, while Kyoto had only 3 teachers with post secondary teacher qualifications and 13 untrained teachers. In comparison with public schools, only one teacher was trained in the three LFPSs. The untrained teachers were either senior high school (SHS) leavers or technical school graduates (ie grade 12). Therefore, in terms of the proportion of trained teachers to untrained teachers in the public rural schools under study, it was about 55 percent, compared to 9 percent in LFPSs under study. This is consistent with findings from the analysis of national data collected in educationally deprived districts of Ghana, where about 50 per cent of public school teachers are trained compared to about 10 per cent in private schools (see Chapter 3).

In terms of the sample of rural public and LFPSs studied, the PTR was higher at the primary level in both public schools and LFPSs than was the case at the junior high school (JHS) level. However, in one of the public schools (Medico School), the PTR was higher than the norm stipulated by the Ghana Education Service (GES), which requires the PTR in classes at the primary and JHS levels to be 35 and 25 respectively (MOESS, 2008). The reason for the large PTR in Medico School was due to the fact that it was the only public school in the community. Nevertheless, it should be noted that even though the sample of schools in this study is too small, PTR patterns in public and private schools respectively are consistent with national data (See Figure 3.4).

Table 7.1: Inputs of Study Public school and LFPS in rural, Mfantseman (2010)

Inputs	Name of Public School			Name of LFPS		
	Medico	Domino	Kyoto	Holomo	Shamo	Fremo
Teacher qualifications	8 trained [19] and 1 untrained	11 trained and 4 untrained	3 trained and 12 untrained	12 untrained (all SSS graduates)	11 untrained (10 SSS graduates and 1 technical school graduate)	9 untrained (SSS graduates), 1 trained, and 2 trainees
Pupil: teacher ratio – primary	93:1	20:1	26:1	37:1	31:1	25:1
Pupil: teacher ratio – JHS	46:1	10:1	17:1	13:1	20:1	10:1
Type of Building	Cement/ concrete block	Cement/ concrete block andpavilion with earth floor	Cement/ concrete block	Cement/concrete block, and mud and thatch structure with earth floor	Cement/concrete block and open-framed bamboo pavilion with earth floor	Cement/concrete block, and structure of bamboo and palm branches
Number of classrooms	9 classroom blocks	6 classroom blocks	9 classroom blocks	3 classrooms made from– cement blocks, and 4 classrooms made from mud and thatch	1 room – cement block and 1 pavilion; some classes held under trees	1 classroom made from cement blocks and a pavilion

Source: The author (Field data, 2010).

All the three public schools had cement block structures and writing desks. Even though Medico Public School was overcrowded, pupils still had furniture to sit on and at which to write. In contrast, all the three LFPSs were either built from mud and thatch or bamboo/wood, roofed with palm branches. In some of the LFPSs, classes were held under trees because there were insufficient classrooms or shelters in which to teach.

A consideration of the input indicators of the rural schools under study (see Table 7.1) in the context of school inputs in Mfantseman as a whole is useful in explaining the quality of public schools and LFPSs respectively throughout the district. Table 7.2 compares public school and private school inputs in the whole Mfantseman district for 2008.

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[19] All the trained teachers have post-secondary teacher training qualification.

Table 7.2: School inputs in the whole Mfantseman District (2008)

Input	Public School	Private School
Primary school teachers		
Trained	422	30
Untrained	232	210
Untrained as total %	35.47	87.5
JHS teachers		
Trained	456	35
Untrained	128	122
Untrained as total %	21.92	77.71
Pupil: teacher ratio		
Primary	42:1	24:1
JHS	19:1	14:1
Schools and classrooms		
No. of primary schools	107	42
No. of classrooms	628	224
% of classrooms NMR	15	1
No. of JHSs	94	31
No. of Classrooms	304	97
% of Classrooms NMR	23	5

Note: NMR = classrooms in need of major repair.

Source: Ghana EMIS (2009).

A greater proportion of public school teachers in the whole district compared to their private school counterparts were trained. Only about a third (35.47 per cent) of public school teachers were untrained compared to 87.5 per cent of private school teachers. Therefore, in terms of percentage of trained teachers, Mfantseman is better than the national average (50%) of educationally deprived districts (see Chapter 3). As expected, the PTR was on average higher at both primary and JHS levels in public schools than was the case in private schools.

However, the number of public school classrooms in need of major repair was proportionately greater than in private schools. Nevertheless, this should not be taken to

signal that LFPSs in Mfantseman enjoyed better school infrastructure. This was because EMIS data was only collected for those schools that were recognised or registered by the GES. Consequently, unregistered private schools, particularly LFPSs in rural areas that were operated in temporary shelters were not taken into account.

Picture 7.1 shows one of the LFPSs under study. Clearly, the structure poses health and safety concerns – education is not simply about outcomes, but is also associated with the environment and safety of learners (UNICEF, 2000). Moreover, this area was prone to heavy downpours and whenever it rained, pupils were unable to attend class, a shortcoming that has implications in terms of 'meaningful access' for children who enrol in such schools.

Picture 7.1: A LFPS in rural Mfantseman

Picture 7.2: A public school in rural Mfantseman

In conclusion, among the different types of school in Mfantseman District, the public sector enjoyed a better quality of inputs than was the case with the private sector, even though the latter tended to have a lower PTR. This pattern is not only consistent with rural schools under study, but also with the national data on educationally deprived schools, as indicated in Chapter 3.

However, if public schools had more and better quality inputs, why did some poor households in rural areas choose to enrol their children in LFPSs? Part of the answer to this question was established in Chapter 6 - a perception that private school had better performance; but what must now be sifted is the evidence of public school and LFPS examination and test results in order to establish whether their perception is aligned with the reality.

7.3 How do examination outcomes for public schools and LFPSs compare?

It is important to note that since unrecognised LFPSs were not registered with the GES, they were unable to establish their own examination centres; candidates from these schools normally entered for the BECE at relatively nearby recognised LFPSs. Using the list of schools obtained from the district office and with the help of two LFPS head teachers, all LFPSs during the period 2007-2009 were identified. This was needed to develop insights into the respective performances of public and LFPSs in the same neighbourhood. Therefore, the analysis of BECE results from 2007, 2008 and 2009 focused on rural communities in which both public schools and LFPSs were located.

Figure 7.1 shows the BECE results for 2007. The results show that across and within communities in which both LFPS and public schools were located, LFPSs performed better in BECE than public school – the overall percentage pass in LFPSs ranged between 83 percent and 100 percent, while public schools passed ranged from 6 percent to 70 percent, but most public schools' passes were below 40 percent. However, one LFPS located in Kokodo community (Private KyeS) performed poorly scoring only 21 percentage pass.

Figure 7.1: BECE results for rural communities in Mfantseman hosting both public and private schools (2007)

BECE results of public and low-fee private schools, 2007

	Public NarM	Private NarH	Public DoD	Public DoA	Private DoS	Public kyeN	Public KyeD	Private KyeS	Public Otu	Public Otud	Private eOtu
No. Presented	40	14	27	20	17	10	35	19	23	16	14
No. Passed	3	13	4	8	14	7	2	4	8	4	14
% Pass	8	93	15	40	83	70	6	21	35	25	100
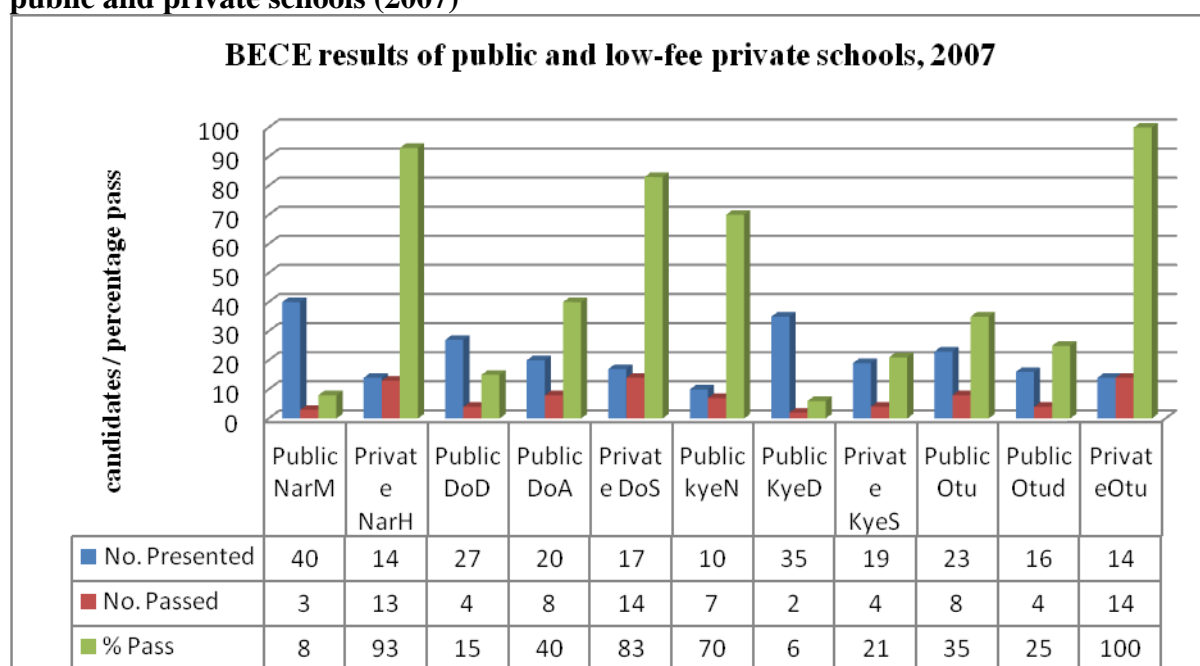
In 2008, of the 7 LFPSs that entered for the BECE (see Figure 7.2), two had 100 percent success, while 3 had passes ranging from 82 percent to 92 percent. Interestingly, the only LFPS in Kokodo community (KyeS) had 9 percent pass, after scoring 21 percent pass in the previous year (see Figure 7.1). Compared to LFPSs, one public school had 100 percent success and another had 67 percent pass, but the majority had passes ranging from 42 percent to zero. It is clear that LFPSs performed better in BECE in 2008 compared to their public schools counterparts, except in one community (Otu community) where both the LFPS and public school had 100 percent successes.

The BECE results in 2009 show similar trend of performance between public and LFPS (see Figure 7.3). Of the 10 LFPSs that entered for the BECE, 5 scored 100 percent pass, but the LFPS in Kokodo community continued to perform poorly, registering 19 percent pass. Only one public school scored 96 percent pass, the rest of the public school success range from 37 percent to zero. Clearly, the BECE results of schools in rural communities hosting both public and LFPS show that the LFPSs generally performed better than public schools. However, the LFPSs generally entered fewer candidates for the BECE than public schools did.

Informal interviews with the head teachers of three of the four LFPSs indicated that several strategies were employed to help better their performance in the BECE. For example, teachers spent additional time coaching pupils at school, using supplementary materials in addition to the government-approved textbooks. Pupils who failed progress examinations were made to repeat the grade, while those who had proceeded to the next grade but failed to sustain a high level of performance in the first term examination in the final year of the basic education cycle were also encouraged to repeat the grade.

If parents were reluctant to have their children repeat a grade, they were given the option of withdrawing them from the school. For example, the head teacher of Shamo LFPS explained that 3 of the 19 final year pupils had repeated the grade in 2008, while one child had left school due their parents' unwillingness for them to be subjected to this policy. Clearly, LFPSs only selected their most promising pupils to enter for the BECE, a practice that would not have been tolerated in public school. It is important to emphasise that these graphs do not take any account of differences in pupil ability and characteristics which, in addition to the school they attend, will affect their BECE results.

Figure 7.2: BECE results for rural communities in Mfantseman hosting both public and private schools (2008)

BECE results of public and low-fee private schools, 2008

	Public Nar M	Private NarH	Public DoD	Public DoA	Private DoS	Public KyeN	Public KyeD	Private KyeS	Public Otu	Public Otud	Private Otu	Public Eku	Private Eku	Public cArk	Public ArkD	Private BeG	Public c SrF	Private AtW
No. Presented	31	13	22	33	17	16	19	11	31	9	17	23	20	12	12	12	23	13
No. Passed	10	6	6	6	14	0	3	1	13	9	17	7	20	8	0	11	8	11
% Pass	32	46	27	18	82	0	16	9	42	100	100	30	100	67	0	92	35	85
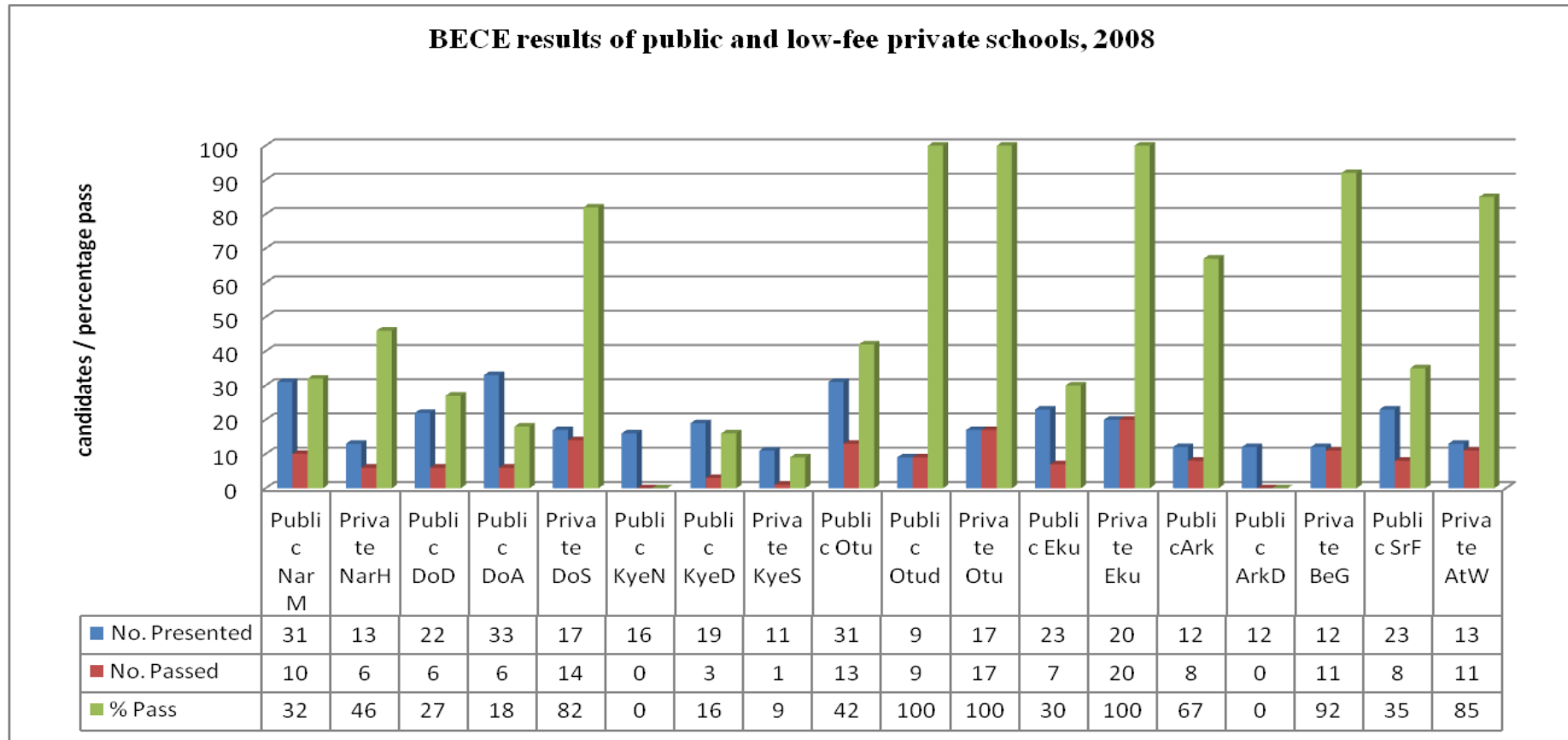
Figure 7.3: BECE results for rural communities in Mfantseman hosting both public and private schools (2009)

BECE results of public and low-fee private schools, 2009

	Publ ic Nar M	Priv ate NarS	Publ ic DoD	Publ ic DoA	Priv ate DoS	Publ ic Kye N	Publ ic Kye D	Priv ate KyeS	Publ ic Otu M	Publ ic Otu d	Priv ate Otu	Publ ic Eku	Priv ate Eku	Publ ic Ark D	Priv ate ArkF	Publ ic SrF	Priv ate SrF	Publ ic Eku T	Priv ate Eku P	Priv ate AtW	Priv ate BeG
No. Presented	65	18	19	46	14	30	45	21	44	36	25	26	9	11	17	42	28	26	9	15	6
No. Passed	15	17	7	11	11	8	1	4	6	13	25	25	9	0	17	13	18	25	9	11	6
% Pass	23	94	37	24	79	27	2	19	14	36	100	96	100	0	100	31	64	96	100	73	100

In order to control for background characteristic of pupils, English and mathematics tests were conducted in 4 LFPSs and 6 public schools in 2007 and 2008. In addition, information on pupils' background was also collected. A regression analysis was conducted to explain differences in performance and progress made by schools. However, it is important to note that the regression analysis was based on the assumption that children were randomly enrolled in the various schools of a given locality ie that selection effects were not an issue, even though some households may in reality have deliberately chosen a specific school for their children. The next section presents the regression results.

7.3.1 Explaining test performance and progress in English and Mathematics

Table 7.3 reports the results of estimation of the effects of schools on the performance and progress made by pupils in English and mathematic tests, controlling for the background characteristics of pupils using regression analysis (see Appendix 6 for description of variables). Dummy variables are used for each school to capture the effects on performance common to all children at the school, which may be considered to capture the effect of the school itself. Without controls for child background characteristics, these dummy variables would also capture the effect of common pupil characteristics. Background controls are included however, while it should be remembered that the dummies will continue to capture the effect of unobserved common characteristics. Nonetheless, the approach provides an illustration of the differences in performance at school level, controlling for important pupil characteristics. The results are not interpreted necessarily as causal effects of schools. The results show that school dummy variables are statistically significant in explaining pupil performance in English and mathematics in the cases of many of the schools under study. The reference category is the lowest performing school, so that the significant effects indicate a significant difference between an individual school and the school with the lowest performance in the category concerned.

The reference category (lowest performing school) for the modelling of results in English and maths is a rural public school. In the case of progress scores, which measure the difference between pupils' score in 2007 and 2008 on the same test, however, the reference category is a rural private school.

Table 7.3: Determinants of performance and progress in test scores at the basic school level

| | Performance 2007/08 | | Progress 2007/8-2008/9 | |
| | (1) | (2) | (3) | (4) |
VARIABLES	English 07–08	Mathematics 07–08	English 07–09	Mathematics 07–09
Sex	0.748	5.180	1.434	5.339
	(0.35)	(2.75)***	(0.53)	(2.37)**
Age	11.399	8.027	5.043	0.352
	(7.32)***	(6.01)***	(2.39)**	(0.21)
Household literacy (Test Sum)	0.064	0.083	0.043	-0.001
	(0.87)	(1.32)	(0.48)	(-0.01)
Dominase circuit schools				
Public rural primary (Kokodo)	17.678	14.611	26.990	-2.957
	(2.10)**	(2.03)**	(2.11)**	(-0.29)
Public rural JHS (Kokodo)	Ref	Ref	39.650	18.995
			(2.84)***	(1.70)*
Public rural primary (Akoma)	6.949	9.883	26.608	-5.110
	(0.79)	(1.31)	(2.11)**	(-0.51)
Public rural JHS (Akoma)	3.199	12.791	24.900	0.127
	(0.37)	(1.72)*	(1.93)*	(0.01)
Private rural primary (Kokodo)	5.903	9.625	37.328	2.583
	(0.69)	(1.30)	(3.06)***	(0.26)
Private rural JHS (Kokodo)	21.324	15.257	Ref	Ref
	(2.27)**	(1.90)*		
Narkwa circuit schools				
Public rural primary (Eku)	29.740	30.093	31.115	11.024
	(3.52)***	(4.19)***	(2.51)**	(1.10)
Public rural JHS (Eku)	28.020	30.404	34.746	15.406
	(3.37)***	(4.21)***	(2.75)***	(1.47)
Private rural primary (Eku)	43.534	38.575	37.530	11.633
	(4.71)***	(4.91)***	(2.79)***	(1.04)
Private rural JHS (Eku)	26.771	30.562	44.197	18.592
	(2.62)***	(3.47)***	(2.97)***	(1.53)
Constant	-100.769	-65.127	-65.924	15.230
	(-4.48)***	(-3.37)***	(-2.34)**	(0.68)
Observations	254	248	175	170
R-squared	0.66	0.57	0.45	0.42

Notes: *** = $p<0.01$; ** = $p<0.05$; * = $p<0.1$; t-statistics in parentheses.

In English, private schools scored higher than the reference public school for the most part when controlling for children's age and sex and for the household caregiver's literacy level. However there were two public schools which also scored highly when compared to the reference school. In mathematics, the pattern was somewhat similar with typically higher scores for the private schools plus the two best performing public schools.

When progress in both English and mathematics is examined, however, a somewhat different pattern emerges. While the models for English and maths results control for background characteristics, they do not control for children's prior ability. And it is not unreasonable to expect that households might enrol more able pupils in private school, or that those with better socio-economic circumstances may have more able children, including because they may have received better education earlier on in their lives. So the progress measures may be considered a better measure of school effects, by controlling for a range of unobserved factors which served to determine the original test score. While advantage in terms of home background will also affect progress, it may be expected to have a much smaller effect than on the first score. In terms of progress in English, there was not a strong pattern of greater progress being made in private schools. Indeed the lowest progress was made in a private school, but otherwise there is no clear distinction in terms of the progress made between the school types. In mathematics, only one school was associated with progress which was higher than in the reference (private) school in statistically significant terms. Interestingly, this was a rural public school.

When comparing within the same community, in Dominase circuit there appeared to be no private school advantage in English or in mathematics scores. Nor was there a clear advantage in relation to progress in mathematics or English. In Narkwa, although the highest scoring school in English and mathematics, when controlling for pupil backgrounds, was a private school, there was no large difference among the schools and the lowest scoring school was also private. Again, in relation to progress, notable differences between public and private schools are not found. In effect, what is found to be generally true of urban and peri-urban private schools– as indicated by the GSS (2005) and Tooley and Dixon (2007) – does not hold in rural Mfantseman District when comparing across and within two education circuits. Apparently, as far as the poor are concerned, the indices of quality are not based on school-level differences in scores which account for pupil backgrounds, but then those are of course difficult to discern. In short, after controlling for the background characteristics of pupils, and especially for prior test scores, the regression analyses showed no palpable systematic differences in performance between public and private schools. Therefore, as far as the poor are concerned, their school choice is influenced by the general claim that LFPSs perform

better in exams than their public schools counterparts, coupled with some poor households' higher aspirations for their children reinforce their preference for private schooling.

7.4 Why are the poor attracted to the LFPS?

The previous section indicates that the LFPSs perform better in terms of test scores than their public school counterparts in the same locality. This raises the issue of what whether or not other factors apart from exam results might attract the poor households to LFPS. This section argues that it is the practices and processes of the LFPS compared to those of the public school that fuel the perception of the higher quality of the former. The section develops insights into how LFPSs gain the upper hand by focusing on the nature of the interaction between parents and schools. It also explores the practices and process of LFPS management in order to explain how it might attract households to private schooling.

7.4.1 Interaction between the school and the household

The way the school relates to the household in a rural setting is significant in understanding the way the household might respond to the school. This section employs interview data derived from head teachers, teachers and parents to explore the nature of the interaction between the school, and (1) households with children in public schools, and (2) households with children in LFPSs.

A dominant view of public school teachers was that parents did not normally visit them at school to inquire about their children's studies. However, all the seven public school teachers interviewed noted that when a pupil was naughty at home or a parent felt that the school had treated their child cruelly, such as in using the cane, they were quick to go to the school to complain. The following comment from a public school head teacher highlights the key issues relating to their interaction with parents:

> *Parents don't come to school to see me except when they have a problem with the school or their child. For example, if the child is proving to be stubborn at home, the parents sometimes come to the school to seek our advice on how to manage them. Just recently, a child had a problem with a teacher in this school and because of that, he refused to come to school.*

> *When his parents reported this to me, I invited the child to the school to explain to me why, and that was when he told me that he had done something in class and the teacher had scolded him publicly – he is an older child – so because of this, he felt humiliated in front of his classmates. I talked to him and was able to convince him to return to school. At other times when a child misbehaves in school, we also ask them to go home and fetch their parents.*

Several teachers interviewed complained that parents' visits were frequently somewhat confrontational. Interviewees noted that some members of the community went to the school with the express purpose of insulting them for disciplining their child. When asked how they interacted with the household, one public school teacher commented, '*Two years ago, I caned a boy for misbehaving in class. The boy went home to inform his parents, who brought the police to arrest me.*' While caning in school is not against the law, the GES regulation stipulates that caning can only be administered by the head of the school or by a teacher under the head teacher's supervision. This is to ensure that teachers do not abuse their authority by caning pupils for committing trivial offences. Clearly, the public school teacher in this case failed to follow due procedure and was therefore liable to prosecution.

Interestingly, the views of many LFPS teachers and my own lesson observations revealed that these schools readily employed corporal punishment – including caning – as a means of attempting to force pupils to learn. However, one private school teacher and former pupil of a public school in the community noted that while corporal punishment might not have been an acceptable method of instilling discipline, it was utilised in private schools when pupils broke school rules, unlike the case in the public education sector. This teacher went on to make her point clear thus:

> *In this school [an LFPS], we do cane pupils but we also teach them…it is only when they do something wrong that they are caned… But in my previous [public] school, the teachers did not go to class… They allowed us to sit and talk in class; but when they did enter the classroom, they would ask the class prefect to bring forward the chatterboxes and we would be caned.*

In my observations of public schools, I also found that when a teacher was absent pupils in that teacher's class were left on their own, another teacher occasionally entering the room to cane the whole class for making a noise. Clearly, if this kind of action was

being practised on a wide scale, some parents might have considered themselves to be justified in confronting the school.

Furthermore, all three public school head teachers indicated that none of them had ever visited a parent at home. However, they noted that when they met parents on their way to or from school, they took the opportunity to discuss their children's problems with them. It is important to recognise that public school heads and their teachers were dealing with poor households in which there was generally no history of schooling (see Chapter 5). These were parents who trusted the state to deliver education to their children, but it appeared that public school teachers interpreted the failure of parents to visit the school as a mark of indifference to their children's schooling. This observation is reflected in a comment made by one public school teacher interviewed:

> *Teachers are given control over the [public] school, which we take as a private arrangement; we solve school issues ourselves. Where parents are expected to deal with a problem, we do it for them. For example, neatness, nutrition, among others, should originate at home. It seems that parents are left behind and the school is seen as the teachers' domain.*

This is the clear expression of a teacher who was frustrated at the lack of parental interest in children's schoolwork. Public school teachers expected parents to demonstrate awareness of their responsibilities by going to the school to find out how their children were getting on. Conversely, of the seven public school teachers interviewed, only one said that he sometimes visited parents at home. Any relationship necessitates reciprocal effort, and children's education requires a healthy interaction between parents and teachers. Household–school interaction is important because parents get to know how well their children are doing at school, while the school also has the opportunity to identify children's problems and address them appropriately. However, this element appears to have been absent amongst the actors involved in rural public education in the research area. The following comment from a public school head teacher highlights the significance of such interaction:

> *Last week, I was doing an exercise and so I called for the class registers. I found that three pupils had not been coming to school for the past three weeks. When their parents were invited to the school to explain why, we found out that even though every morning they got dressed to go to school,*

they ended up somewhere else… So, I reminded the parents of the need to visit the school regularly.

Evidently, if the school had taken more of an interest in its pupils' daily attendance and followed up cases of prolonged unauthorised absence with households, incidents such as the three weeks' non-attendance in the above example could have been avoided. However, by their own admission, rural public school head teachers and their staff did not place much importance on visiting parents, which could have been a reflection of the extent to which they viewed their role in the provision of education – classroom teaching only. Yet, in a context in which parents believed that it was the responsibility of the school to reach beyond the mere provision of tuition, it is hardly surprising that they tended to respond to those institutions they perceived as being genuinely interested in building a personal relationship with them.

In contrast to the public schools under study, all three LFPS head teachers interviewed indicated that parents did sometimes visit them at school. They added that attitudes varied, and while some parents did not even check their children's report cards, others were quick to go to the school when they discovered that their children were not doing well. In addition, all three LFPS head teachers asserted that they regularly visited parents, especially when a child had been absent from school. The following comment from an LFPS head teacher is illustrative:

> *Not all parents come to see me. Those who come to see me at school are those who do not understand certain things…some even come to my house if they are not clear about something. Some parents do not look at their children's report cards, but others go through exercise books and when they are not happy with a child's performance, they come to see me at school. There is a teacher who is responsible for giving me daily reports of what is happening in school; for example, if a parent has a complaint, or if a child does not come to school for two or three days...then I will follow it up by visiting the parents…that is something the parents like. Friday is my day for visiting the remote villages, which I go to on my motorbike with the class teacher whose pupil has not been in school. Often, when we get to the community the people are surprised to see us, and some will say to the parent, 'You are really lucky a whole headmaster has come to see you!'*

As was the case with the public schools under study, not all parents with children in private school visited regularly. However, in terms of the LFPSs under study, interviewees noted that parents who did visit the school tended to blame their children

for poor schoolwork rather than directly accuse the teacher of incompetence. However, unlike public school head teachers, their LFPS counterparts had a policy of visiting parents if pupils were absent from school for two or three days. As indicated in chapter six, parents regarded teachers' visits to their homes as a demonstration of how much LFPSs cared about their pupils and the respect with which they treated parents.

However, some public school teachers viewed LFPS heads' practice of visiting parents as a marketing exercise − a strategy to lure people into enrolling their children in their school. The following statement by a public school head summarises how some public sector teachers regarded the activities of the LFPS:

> *One trick they [private school head teachers] have been playing on us is that when they realise that one of our pupils is a high achiever, they will go to the parents and tell them that their child is good but could do better if they went to the private school… The parents then agree to send their children there because they believe that the private school teaches better than the public school… maybe because of their BECE results.*

It appears that public schools were acutely aware of the persuasive enrolment drive strategies adopted by private schools but, surprisingly, none of the public school head teachers interviewed indicated that they had ever visited a parent at home. Consequently, parents perceived the LFPS practice of conducting out-of-school follow-up of pupils' progress as an innovation intended to promote the education of their children. The following comment from an LFPS head teacher highlights the importance that parents attached to such visits:

> *When they [parents] see me in their homes, they are very happy because in the first place, I know where they live. Secondly, they can at least boast that this is their child's headmaster…so when I go to their homes, I am held in even higher esteem than the president… When I visited a boy in Edumano community, which is about a kilometre away…the boy's parents said that they were indeed very happy… The boy was ill but didn't want to go to hospital… I carried him to the hospital and back to his house on my motorbike… Because of this, some parents enrolled their children in my school… When I go to the nearby village on my personal visits, I take the opportunity to go to see some of the parents and crack jokes with them, and they very much appreciate this.*

The above comments also corroborate household head assertions in respect of their preference for the LFPS. Households appreciated the way in which private school head teachers interacted with them, particularly when their children did not report to school. For those households that experienced difficulty in keeping their children in school, private school head teachers' visits helped to ensure regular attendance.

It may thus be concluded that the LFPS enrolment drive strategies were most persuasive, being implemented by means of social interaction and network building with households. This clearly shows that there were activities being played out below the surface of the education arena in rural communities. One key strategy was the nature of the interaction between the LFPS and the household, which contributed to the interest of the poor in these schools, a phenomenon that had a direct effect on the decisions they made in terms of school choice.

7.4.2 The perception of private education in relation to public schooling in the same locality

There were certain LFPS practices that often determined the way in which households regarded private education in relation to public schooling in rural Mfantseman. In order to explore such practices, heads, and teachers of public and private schools, SMC members, and parents were interviewed. In addition, intensive classroom observation of teacher contact time was conducted. The emergent themes are discussed under three main headings: the strict enforcement of school discipline, the utilisation of teacher contact time, and school management strategies.

The strict enforcement of school discipline

Interviewed LFPS head teachers explained that there were a number of factors which attracted some poor parents to their schools. Firstly, the heads argued that their enforcement of strict discipline had a strong appeal. Interviewees stated that there were rules of behaviour laid down in their schools and pupils who broke them were punished. For example, if a child reported to school late they were made to weed the school field/farm or carry stones and sand. The following comment from a head teacher summarises how the school went about instilling discipline into its pupils:

A child must be in school at six thirty in the morning and after six thirty, we take a roll call and they will be punished if they are not in school... At the slightest sign of misbehaviour, we will hand out a physical punishment that must be undertaken...by making them do the weeding...sometimes, collecting stones for the school to sell to raise money. They do it and their parents don't complain. If they don't do it, we will expel them from the school... Some of the children, when you punish them, they decide to go home...so when they do, their parents come and beg, but we still go ahead and punish them before we accept their parents' apology. This means that parents are confident that when they bring their children here, they will not be spoilt...so they always bring us naughty children to train them.

This account demonstrates the firm position this LFPS took with regard to instilling discipline in this school. As noted earlier, the contemporary GES ruling on corporal punishment was that caning should only be administered by the head, or by a teacher under the supervision of the head. Yet, it might reasonably be argued that corporal punishment should not have been tolerated in school at all because it violated the rights of the child. However, even when the law allowed the minimal use of corporal punishment, public schools – unlike LFPSs – had difficulty in applying it as a disciplinary tool. One reason is that the LFPS did not hesitate to expel a child whose parent behaved antagonistically toward them, an action that would not have been tolerated in the state system. This is how one LFPS teacher recounted his dealings with a parent:

The way a parent will insult a teacher somewhere [in public school]...that cannot happen here in my school. I well remember we came for a PTA meeting and we decided to levy parents for the making of bricks. We agreed that if a parent refused to pay, we would expel their child. Parents who failed to attend the PTA meeting also had to pay a fine of Gh¢2. When I started implementing the PTA's decision, some parents started insulting me. I kept quiet and bided my time until I found a scapegoat... .. A female elder [the queen mother] was insulting me and I had evidence, so I decided to expel all four of her children from school...she came to the school begging, but I still went on to suspend her children for two weeks. Since that time, no parent has tried to insult me, at least in my hearing... It is the discipline that is working here, and parents also respect it.

This is an illustration of how LFPSs abused pupils and parents in rural communities, all in the name of instilling discipline. In contrast to what was happening in the private

education sector, public school head teachers were constrained by GES regulations, which determined the extent to which they could penalise pupils and parents.

Furthermore, several interviewed parents complained that lack of teacher discipline in public schools did not promote child discipline. An LFPS head teacher who also worked as a part-time Mathematics teacher at a public school in the community expressed shock at the behaviour of public school pupils:

> *Here [in private school], when we punish pupils, they don't complain…they carry the punishment out before complaining. The other day, I went to Domino Public School to teach, and while I was in the classroom teaching, a pupil came walking through. I asked the pupil to kneel down but was shocked when he asked me what offence he had committed… I said to the child, 'you will not do this in my school.' When I reported the case of the child's behaviour to the assistant head later, all he said was, 'This is the problem we are facing here in this school.'*

Unlike LFPS head teachers, those of public schools were expected to act within the law and were therefore forced to operate under difficult constraints. For example, a public school head teacher and two LFPS head teachers noted that most public school teachers did not respect their heads because they had control over neither their appointment nor their dismissal. The head teacher of one public school described the nature of the relationship between him and his teachers as follows:

> *Here, in the public school, there are some limitations…over there [at the private school], the teachers are forced to work and if they don't, they will not be paid; but here, you cannot force a teacher to work. The teacher can decide to be sick…what can you do? Over there, if the head realises that they are lying or pretending to be sick, they will lose that day's pay or even be sacked from the school… You have staff [in the public school] who are not co-operating…you have staff whereby only a few are willing to do their best, while others are relaxing under a tree… For example, look at what is happening here…you can see [referring to the researcher] that only two or three teachers are in the sun preparing the children for the Sixth of March [Ghanaian Independence Day], while the rest are sitting there looking on.*

This is a typical example of how public school head teachers and their staff related to each other, several teachers in both public schools and LFPSs confirming that a similar situation prevailed in almost all the public schools in their communities.

This stands in marked contrast to the situation in the LFPS: my school observations revealed that when an LFPS teacher was absent, their colleagues were willing to take on the additional responsibility of covering the class. Informal interviews with teachers indicated that their heads expected them to cover whenever a class teacher was absent, a requirement with which they readily complied since they did not want to incur the displeasure of the head. In the public school, such co-operation was seldom the case, even when the head formerly requested a teacher to cover for their colleague. This was because public school teachers believed that their responsibility lay solely with their assigned classes or subjects. One private school teacher summarised his views on teacher–teacher interaction in his school thus:

> *In public school, the problem flows from the teachers to the head of the school… Among the teachers, there seems to be a lack of good interpersonal relations whereby when one teacher is not there, another would go and take care of the class… For example, the main subject I teach is Mathematics, but the form three class doesn't have an English teacher, and so I have taken it upon myself and have been teaching them English and sometimes Social Studies. In public school, I can't see a primary school teacher going to teach in JHS... There was one incident just last year when a primary school teacher went to the JHS just to help them in Mathematics [on account of the Mathematics teacher being absent for several days], and when the Mathematics teacher reported to school and found that a teacher from the primary school had come to teach his pupils he was very angry.*

Since private school head teachers operated under market conditions, they had a sense of power over and responsibility for their staff. In contrast, public school teachers might not have felt a sense of accountability to their heads since they were posted to the school by the state. As a result, this could have affected their sense of commitment to the school and its leadership. The implications of such a situation are that when a teacher was absent from school, it was a problem for either the head teacher alone to solve or else the pupils were left to their own devices.

Indeed, in many instances during my school observations, I came across a classroom full of children but a teacher never entered it to teach all day long. Empty classrooms due to the teacher being absent, on transfer, or undertaking further studies constituted a common phenomenon in the public schools under study, a situation that parents were well aware of and one that was a source of worry to them – after all, they wanted their children to go to school to learn. LFPSs appear to have capitalised on the situation in

public schools, demonstrating to local parents that they were able to provide better education outcomes by ensuring that at least some learning took place even when a teacher was not in school.

Moreover, teacher discipline, both at school and in the community, could affect children's behaviour and parents' attitude to the school. Some parents and LFPS teachers lay the blame for pupil indiscipline in public schools partly with their teachers; arguing that if teachers were openly disrespectful to their heads or were guilty of misconduct in the presence of their pupils, the latter would follow such examples and fail to respect their elders. This view is clearly expressed in the following statement by an LFPS head:

> *When teachers do not respect the headmaster, the children will see it and will not respect their teachers either; so, that is when the problem starts… For example, we are going to have the Sixth of March…as a teacher you should prepare the children and you should be on the playing field with them. But the master gives the command and the teachers do not do it…it becomes contract work for one or two teachers while the rest relax. It means that the rest don't respect the headmaster. So, when the teacher tells the children to do something, they will be messing about and won't want to do it…when the children go home they tell their parents. At times, you find teachers fighting…quarrelling and insulting each other while their pupils are also there. So, the parents have seen that even the teachers themselves don't respect each other…so how much will they respect the teachers?*

Several interviewed parents indicated that such behaviour between the head teacher and their staff seldom occurred in the LFPSs; and both teachers and head teachers of LFPSs attested to the fact that when similar incidents did take place in their schools, the teacher concerned was often forced to resign. Child discipline in school was clearly linked to good manners in teacher–head teacher and teacher–teacher interaction, something that appeared to be lacking in most rural public schools. Parents in the various communities were aware of the behaviour of teachers in the various kinds of school in their communities, prompting some poor households to respond to the tendency towards a negative role model on the part of public school teachers by opting for an LFPS.

The utilisation of teacher contact time

Another in-school practice that constituted a significant factor in reinforcing the interest of households in the LFPS was teacher contact time utilisation. Each term, basic schools had a programme of activities that led to loss of instructional time. For example, it was mandatory for all schools irrespective of type to participate in inter-school sports activities and Independence Day celebrations. However, teacher interviewees at both public schools and LFPSs indicated that the latter were selective in their participation in co-curricular activities such as sports activities in the education circuit and wider district. Even though LFPSs were obliged to participate in co-curricular activities as were public schools, interviewees including parents and teachers still considered them to be a waste of instructional time. Therefore, when LFPSs engaged in activities outside the classroom, they ensured that the time lost was recovered through an adjustment to the timetable, teaching lessons later than usual and beginning school early. The following comment by a head teacher explains some of the time recovery strategies employed by LFPSs:

> *During sports activities and preparations for Independence Day celebrations, we lose about two to three periods of teaching time every morning, and we try to make up for this loss by extending school home time from two p.m. to four p.m. each day. Again, instead of beginning the school holidays on the same date as the public schools, we finish a week later and reopen a week earlier, and this gives us an additional two weeks, which enables us to make up for the lost time.*

However, several interviewed parents complained bitterly about how preparation for circuit or district sports competitions and Independence Day celebrations enabled the majority of pupils who were not taking part to simply loiter idly about.

With regard to another cause of lost instructional time, the SMC chairperson of one of the public schools under study noted that he could not understand why, given that there were so many unemployed educated people in the community, the government preferred to engage teachers on national programmes such as immunisation, national censuses and voter registration exercises that took them out of their classrooms for at least two weeks each time.

Insights gained into the nature of instructional time lost due to co-curricular activities and public programmes prompted a further exploration of public school and LFPS utilisation of instructional time. Therefore, an intensive observation exercise of teacher contact time in grades 1, 4 and 6 in two public schools and two LFPSs was conducted. By making a comparison with teaching timetables, the study attempted to determine whether teachers actually utilised the teaching time allocated to each subject as indicated on the timetable (see Appendix 7). It is important to note that in both public schools and LFPSs, teaching timetables were not strictly adhered to; however, it was still possible to estimate instructional time usage as each class had a specific number of subjects that had to be taught each day. The summarized results for two schools – one LFPS and one public school – are reported in Tables 7.4 and 7.5.[20] (See Appendix 13 for details on teacher contact time)

Table 7.4: Teacher contact time in LFPS

Primary 1/Grade 1	Primary 4 / Grade 4	Primary 6 / Grade 6
Teacher gives pupils exercises but not much engagement with pupils. There is excess time use for every subject taught. Time loss in day 1 is 27 minutes, day 2 is 1 hour 45 minutes, day 3 is 1 hours, day 4 is 40 minutes and only makes excess use of teaching time on day 5. Total time loss is 3 hours 52 minutes	Teacher makes excess use of time per subject taught -time spent writing notes on the board and marking exercises. Time loss in day 1 is 30 minutes, day 2 is 45 minutes, day 3 is 15 minutes, day 4 is 45 minutes and day 5 is 1 hour 20 minutes. Total time loss is 3 hours 35minutes	Teacher makes excess use of time such as spending long time writing questions on the board and marking. Teacher occasionally leaves class to chat and sometimes teacher is in class but not te aching. Time loss on day 1 is 1 hour, day 2 is1 hour 10 minutes, day 3 is 2 hours 15 minutes, day 4 is 10 minutes and day 5 is 1 hour 12 minutes. Total time loss is 5 hours 47 minutes

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[20] Four schools (two public and two private) were observed, but only one of each type was utilised in the analysis of teacher contact time, owing to the fact that patterns of classroom activity were similar in both school types.

Table 7.5: Teacher contact time in the rural public school

Primary 1/Grade 1	Primary 4 / Grade 4	Primary 6 / Grade 6
Teacher generally arrives late to school, leaves classroom and sits under a tree or veranda chatting with colleagues. Teacher sometimes in school but not teaching. Time loss on day 1 is 2 hours, day 2 is 3 hours 20 minutes, day 3 is 3 hours 15 minutes, day 4 is 3 hours 39 minutes and day 5, 4 hours 21 minutes. Total time loss is 16 hours 35 minutes.	Teacher normally gives exercises to pupils and reads her distance education programme course book. Pupils are made to use teaching time to play. Also, makes excess use of teaching time on just on subject. Time loss in day 1 is 2 hours 56 minutes, day 2 is 1 hour 13 minutes, day 3 is 3 hours 14 minutes, day 4 is 3 hours 45 minutes and day 5 is 3 hours 56 minutes. Total time is 15 hours 4 minutes	Teacher makes excess use of teaching time. Regularly teacher leaves classroom during contact period to chat with colleagues. Sometimes teacher in class but not teaching. Time lost in day 1 is 1 hours 51 minutes, day 2 is 2 hours 10 minutes, day 3 is 3 hours 2 minutes, day 4 is 2 hours 6 minutes and day 5 is 2 hours 34 minutes. Total time lost is 11 hours 9 minutes.

Evidence from the classroom observations shows that in terms of processes, there was generally an excessive use of time per a subject, which resulted in only half of the subjects on the timetable being taught each day, a phenomenon that was more pronounced in the LFPS. On the other hand, in the public school, even when teachers were present, they seldom remained in the classroom for the whole teaching period.

In terms of the utilisation of teacher contact time, out of a weekly timetable of 25 hours per class per week, the LFPS lost 3 hours 52 minutes in grade 1; 3 hours 35 minutes in grade 4; and 5 hours 47 minutes in grade 6, representing 15 per cent, 14 per cent, and 23 per cent respectively. Public school teachers lost a significantly greater amount of teacher contact time: in grade 1, 16 hours 35 minutes; in grade 4, 15 hours 4 minutes; and in grade 6, 11 hours 9 minutes, which constituted about 66 per cent, 60 per cent, and 44 per cent respectively.

In all the public schools observed, at least two classrooms were permanently without teachers as heads waited for new members of staff to be posted. In terms of classes that

did have regular teachers, many reported to school but did not necessarily engage the pupils in teaching and learning activities. In many instances, teachers were in school but not in the classroom for most of the day or else left school before home time.

The fact that the Educational Assessment and Research Centre (EARC, 2003) found teacher absence from school to be a major cause of time loss nationwide – amounting to about 19 per cent – notwithstanding, this study found the principal cause of time loss to be attributable to a phenomenon whereby the teacher was in school but not present in the classroom. This is consistent with other studies, such as Suryadharma et al. (2004) cited in Abadzi, 2009), which found that 47 per cent of time lost to teaching resulted from teachers remaining outside the classroom during teaching hours in India. These observations are also corroborated by household head assertions with regard to teaching in public schools.

Clearly, there is evidence that teacher contact time was not maximised in either public schools or LFPSs; however, the sources of time loss varied by school type. LFPSs lost comparatively little instructional time, but all observed teachers made excessive usage of contact time such that inordinately long periods were spent on just one subject. On the other hand, in public school in particular, teachers tended to report for work but did not actively use the time to teach.

Thus, if the time lost due to the failure to maximise teacher contact hours is added to that lost due to absence and secondment to national programmes, such an annual deficit is much greater in the case of the public school than in the LFPS; a factor that has significant implications for the provision of high quality public education in rural areas. Therefore, when processes and teacher contact time usage are added together, the result corroborates the views of households in respect of the relative merits of public and private schools in a given locality (see Chapter 6); hence the interest shown in LFPS education.

School management strategies

The management of an LFPS can be likened to that of a sole proprietorship business, in which the school head or proprietor takes decisions with the overriding goal of making a

profit. Thus, the unique position of the LFPS heads enables them to maintain strict supervision and adopted strategies aimed at improving the school's academic performance.

In two of the LFPSs under study, the proprietors revealed that in 2008 they had established camps[21] for their final year JHS examination pupils in rented accommodation on or close to school premises. While the other two LFPS proprietors stated that they did not put their final year pupils into such accommodation, one school organised compulsory evening tuition for their examination class while the other made it compulsory for final year pupils to join their parent school in an urban area. This practice enabled LFPSs to provide pupils with extra classes in the evening and also to supervise their evening studies.

Interviewees argued that rural children would not read if left to their own devices; therefore, in supervising homework, they were at least ensuring that pupils did some revision for their final examinations. The following comments from an LFPS proprietor/head teacher highlight some of the strategies they adopted:

> *For the final year pupils [JHS 3], what we do every year is to organise evening classes from seven p.m. to eight p.m. every day for them. Yesterday, for example, they studied Science and today it will be Mathematics. At the end of the lesson, the teacher and I [the school proprietor] accompany all of them to their homes.*

LFPS employed such strategies to ensure that final year pupils were given additional support in revising for their BECE examinations. The practice of accommodating examination candidates in a camp was common practice amongst urban private schools, which had been mimicked by LFPSs in rural areas.

In addition, all the LFPSs under study indicated that their mock and final examinations were set at the beginning of term by an external body called the Centre for Performance Monitoring and Evaluation (CPME), which distributed a scheme of work to the school the at the end of the previous term, thus allowing it to teach specifically for the examination.

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[21] Examination candidates stayed in temporary residential accommodation, which was under school supervision.

In conclusion, the analysis identified four key factors associated with the popularity of the LFPS that explained why the poor were attracted to them. Firstly, LFPSs capitalised on the weak level of interaction between public schools and parents, in offering a viable alternative by means of follow-up with households when children failed to attend school due to illness, reluctance to go to school, or for any other reason. The LFPS social interaction approach won over the hearts and minds of parents, particularly in those households in which no one was educated and the schooling of at least some of its younger members was regarded as being long overdue.

Secondly, public school heads found it difficult to manage their teachers effectively since they had no control over their appointment or dismissal. Pupil indiscipline and the unprofessional behaviour of some teachers in the public schools under study also meant that with their extremely strict enforcement of discipline, the LFPS became the preferred option for some poor households.

Thirdly, observations revealed that public school pupils sometimes had just one or even no lessons all week, while the LFPS provided at least some teaching each day, even in the absence of one or two teachers. Households were aware of these differences and reached the obvious conclusions.

Finally, rural LFPSs replicated some of the practices of private schools in urban areas, for example, the accommodation of examination candidates in camps in order to coach them in the evenings; and the supervision of reading was also regarded by parents as a significant factor in improving their children's chances of examination success. All of these factors combined to prompt households – including some of the poorest – to take a renewed interest in private schooling.

7.5 Summary

This chapter has put forward two arguments. Firstly, it contends that the perception of the rural poor that the LFPS provides a better quality of education compared to the public school is not borne out by the evidence. Secondly, it argues that there are

practices and processes embedded in the rural school environment that conspire to drive the interest of the poor in private schooling.

Evidence from the analysis of public school and LFPS quality input indicators shows that the former had a greater number and better quality of teachers, and school infrastructure, but that this was accompanied by a higher pupil to teacher ratio than the private school. This finding is consistent with national data on educationally deprived schools (see Chapter 3) and therefore raises concerns about the quality provided by LFPSs. This is because high quality education is not just about outcomes but also about children attending school regularly in a healthy and safe environment. What is clear from the examination of LFPSs is that several of their school buildings posed significant health and safety risks to learners, and were not sufficiently weatherproof so that schools had no choice but to close during the rainy season. However, parents value BECE exam results and LFPS heads interaction with them and these were the principal motivation for choosing LFPSs.

Moreover, analyses of both public and private school BECE examination results in urban and peri-urban areas reveal higher private school performance (see chapter 3; GSS, 2005), confirming Tooley and Dixon's (2007a) findings from Ga West District, Ghana. The descriptive analysis of BECE results in rural communities in Mfantseman District that host both public and LFPSs shows that private schools generally had better results. However, there are public schools that perform just as well – or indeed just as poorly – as the LFPSs.

In addition, the analysis of English and Mathematics test results, controlling for the background characteristics of children, shows no significantly better performance by LFPSs. The test results show that only one public school made progress in mathematics. Therefore, what is generally the case in urban and peri-urban environments does not hold true in the sample of schools in rural Mfantseman. Clearly, the reason why the poor choose LFPS may be due to their better performance in examination and achievement tests coupled with households' higher aspirations for their children fuels interest in private schooling.

Aside from the perception of quality which was not related to actual exam and tests performance, the qualitative evidence shows that there were practices and processes in the rural schooling environment that attracted the poor to the LFPS. For example, an aggressive enrolment strategy was employed; head teachers regularly visiting parents at home and ensuring that pupils attended school was a key strategy in prompting poor households to respond with a demand for private schooling.

There were practices and processes within the LFPS environment that did not exist in the public school, such as the strict disciplining of pupils and teachers, and the more efficient use of contact time, all of which attracted households. However, as the analysis shows, the LFPS employment of strict discipline meted out in the form of physical punishment constituted an abuse of the rights of the child; and this kind of practice was not tolerated in the public school system due to GES regulations.

Given that the preference of the poor for an LFPS education for their children must be backed by an ability to pay for it, the next chapter examines the role that the direct costs of schooling plays in the choices households make.

Chapter 8: Analysis of Findings III

What role does cost play in school choice in rural Mfantseman?

8.1 Introduction

The cost of education and its interaction with household school choice decisions in poor rural communities constitute an issue that is central to this thesis. This is because a poor household's decision to send a child to school and its selection of a particular type of school are influenced by consideration of relative costs. Even though evidence from a number of studies in developing countries indicates the cost of education forms a barrier to the access to schooling (Oduro, 2000; Chao and Alper, 1998; Penrose, 1998; Bray, 1996), recent research into private education in Asia and Africa, including Ghana, suggests that in the case of the LFPS, the poor might be willing to make a small financial contribution in the hope of receiving a high quality education for their children (Tooley and Dixon, 2007a; Tooley, 2005; 2009).

There is a persuasive argument that the abolition of school fees through a fee 'free' education policy could result in expanded access to public schooling. However, without significant reduction in other costs (direct and opportunity costs) together with an improvement in the quality of schooling, some poor households in rural areas may still not consider public education to be a viable option in the long term and even less so with private education because of additional costs that it imposes on households. This chapter explores the extent to which the direct costs of schooling to the household interact with school choice. It also compares the income and expenditure of the LFPSs under study to determine to what degree they might be sustainable.

This chapter addresses several questions. Firstly, how much do households spend on education; what are the main expenses incurred in public and LFPS respectively; and how do costs vary between public and private schools? Secondly, what factors are associated with household expenditure on education; and how important is cost in influencing school choice? And finally, to what extent are LFPSs in rural Mfantseman sustainable?

The analysis begins with an examination of the composition of the direct household costs of schooling in the public and LFPS sectors respectively. This is followed by an independent sample t-test to determine whether there are significant differences in household direct costs of public and private schooling, and what it means for poor households' school choice decisions. A standard multiple regression analysis is employed to explain patterns of expenditure in basic schools in the selected rural communities in Mfantseman, and how significant factors related to school choice decisions. This is followed by an assessment of the ability of poor households to pay school fees by estimating the proportion of household income expended on public and private education respectively and this also compared to the national data (GSS, 2008). It also examines school data on fee payment and the contents of interviews with household heads in the lowest income group (quintile 1) on their survival and management strategies. Finally, the financing of the LFPS is explored in terms of its long-term sustainability. The chapter summary highlights the significance of the cost of education to the poor household's access to and choice of schooling in rural Mfantseman.

8.2 How do the direct costs of schooling vary by school type?

In my household survey of the rural communities under study in Mfantseman District, detailed data were collected on basic schools' per-term education expenses. It is important to note that due to the capitation grant allocated to schools, there were no direct charges such as tuition or examination fees levied on parents with children in public school. However, parental contribution to the operational costs of the public school was permitted with the express permission of the SMC or district director. Yet, in the case of the LFPS, these charges (tuition and examination fees, and parental contribution) constituted over ten per cent of average direct cost per term (Table 8.1).

Generally, LFPSs required considerably higher contributions than did public schools and the cost of items including food, stationery and uniform were also higher in the private education sector. This is because these items were mandatory charges in LFPSs. While it would be difficult to argue that any variation in expenditure by grade in public school arose from the fee-free policy or implementation of the capitation grant, there

were marginal variations in LFPS cost by grade due to small differences in tuition and examination fees (see Appendix 8 for LFPS fees by grade).

Table 8.1 compares average direct termly cost per pupil in LFPSs and public basic schools respectively; data for LFPSs are given in columns two to five, while those for public schools are shown in columns six to eight. Of the four LFPSs under study, only one did not report the cost of transport to school. Of the remaining three, two (Shambu and Shamo) indicated that such costs constituted about 12 per cent (Gh¢9.80) and 14 per cent (Gh¢10.24) of average direct costs per term respectively. On the other hand, none of the public schools under study reported transport costs. This might be explained either by their proximity to the communities they served or the fact that there was normally a school actually located in the community with regard to those households that opted for public education.

Table 8.1: Average direct costs per child per term in Ghanaian cedis for LFPS and public basic school respectively (Gh¢1.43 = US$1 at 2004 rate)

1	2	3	4	5	6	7	8
	Low-fee private schools				Public schools		
Item	Shambu	Shamo	Holomo	Fremo	Medico	Domino	Kyoto
	n=117	n=134	n=67	n=168	n=450	n=212	n=257
Transport	9.80	10.24	N/A	2.88	N/A	N/A	N/A
	(11.53)	(13.67)	(0.00)	(5.56)	(0.00)	(0.00)	(0.00)
School meals	38.71	30.45	25.7	18.7	16.75	22.57	22.26
	(45.53)	(40.65)	(38.36)	(36.09)	(44.92)	(57.84)	(64.18)
Tuition fees	10.47	7.97	13.83	5.04	N/A	N/A	N/A
	(12.31)	(10.64)	(20.64)	(9.73)	(0.00)	(0.00)	(0.00)
PTA contribution	1.50	1.00	0.97	0.5	N/A	2.50	1.41
	(1.76)	(1.33)	(1.45)	(0.96)	(0.00)	(6.41)	(4.07)
Examination fees	2.12	1.64	1.58	1.72	2.28	N/A	N/A
	(2.49)	(2.19)	(2.36)	(3.32)	(6.11)	(0.00)	(0.00)
Extra classes	7.00	8.37	6.13	8.13	N/A	N/A	N/A
	(8.23)	(11.17)	(9.15)	(15.69)	(0.00)	(0.00)	(0.00)
School uniform	6.31	9.66	12.34	8.01	10.19	7.07	7.81
	(7.42)	(12.89)	(18.42)	(15.45)	(27.33)	(18.12)	(22.52)
Stationery	9.12	5.59	6.44	6.84	8.07	6.88	3.20
	(10.73)	(7.46)	(9.62)	(13.20)	(21.64)	(17.63)	(9.23)
Average total cost per child	85.03	74.92	66.99	51.82	37.29	39.02	34.68
	(100)	(100)	(100)	(100)	(100)	(100)	(100)

Notes: figures in parentheses are column percentages. N/A = not available and/or not applicable.

Source: The author (Field data, 2008).

However, in the case of the LFPSs, some head teachers indicated that they charged a fee to provide transport for pupils who had long distances to travel. The statistical results

for household school choice in chapter 6 (see Table 6.1) indicate that the further away a private school was situated from a pupil's home in comparison to a public school, the more likely a household was to choose the latter. The general conclusion is that children who went to school outside their communities were enrolled in private school. This is an indication that the cost of transport influenced school choice decisions.

School meals (food at school) constituted the most expensive single item of all the direct costs of education in both private and public schools, although households that enrolled their children in the former incurred the highest expenditure on food. The cost of LFPS meals ranged from Gh¢18.7 to Gh¢38.71 per child per term, while that at the public schools ranged from Gh¢16.75 to about Gh¢23; thus the cost of LFPS meals was on average about one and half times that of the public school. Informal interviews with parents revealed that, some children refused to go to schools if they were given food rather than money for food. The relative high cost of meals in LFPS compared to public was due to the fact that it was mandatory and also cost a bit more in an LFPS than a public school.

One would expect private school tuition fees to have been much higher than the cost of school meals but this was not the case. It was found that the LFPSs either contracted local food vendors to sell food on school premises or made their own arrangements for pupils to purchase food. In contrast, the purchase of meals was not obligatory in public school, and vendors sold food to pupils on the premises without a contractual arrangement with the school. Nevertheless, in effect, tuition fees, extra classes, and expenditure on food appear to have been the principal causes of increased household education expenditure with regard to the LFPS.

This pattern of expenditure is consistent with the evidence presented in Chapter 3. Also, GSS (2008) concludes that in the rural coastal area in which the district under study is located, annual food, board and lodging costs at primary school constitute the highest average household expenditure item (26.4 per cent), while tuition and registration fees account for only five per cent of total expenditure per year. Given that of the 279 households that chose public schooling (see Table 8.3) 23 per cent fell within the lowest income group, the relative high cost of school meals could have served as a disincentive

to some poor households to enrol their children in public school, especially if they considered the opportunity cost of education to be high and the quality doubtful.

As noted earlier, public schools were tuition free but private schools were not. The LFPS tuition fee constituted only about a tenth of total its direct schooling costs. When this is compared with the cost of meals, extra-classes and stationery, it can be inferred that the marginal cost of paying private sector fees was not so prohibitively high so as to discourage some poor households from opting for private education. Clearly, auxiliary cost items (e.g. meals, stationery and extra classes) constituted a significant proportion of the direct household cost of schooling; but in public basic school, the cost of uniforms and stationery per child averaged about a fifth of the average total direct cost of schooling.

This kind of cost structure at the basic school level – at which auxiliary costs in terms of both public and private schools constituted significant proportions of average direct expenditure on education – provided an incentive for poor households, which perceived private schooling to be a better alternative, especially if they thought LFPSs offered value for money; and they were therefore willing to make sacrifices in order to help realise their aspirations. Thus, focusing simply on direct costs as the key determinant of the poor household's decision in choosing between public and private schooling could be misleading. Equally, policies solely concerned with the abolition of direct fees might not necessarily translate into a higher demand for education by the poor because costs depend on other things apart from school fees.

8.2.1 Principal direct household school costs

In order to understand the main direct household costs of schooling, expenditure per child per term by school type was estimated. In households in which there was one child in public school and another in LFPS, the respective cost of education was entered against the school type that the child was enrolled in.

Table 8.2 shows direct household education costs by school type. Even though public schools did not charge school fees, parents were still obliged to make a financial contribution to the school. For example, public school PTAs required occasional

payments, the amount a household was required to contribute depended on the number of children it had in school; this averaged out at Gh¢1.3 per term, which was more than the similar average contribution made per child at LFPS (Gh¢0.99). Moreover, households that enrolled their children in public school had to pay an examination fee – Gh¢0.76 per term on average – even though the capitation grant was intended to cover such expenses.

Table 8.2: Direct household cost of education per child per term by school type

Cost item	Public school	Low-fee Private school	Cost differential (private minus public)	Percentage cost differential
Transport to and from school	0	4.08	4.08	13.9
School meals	17.46	25.27	7.81	26.60
Tuition fee (school fees)	0	8.10	8.10	27.60
Parental contribution (PTA)	1.3	0.99	-.031	-1.10
Examination fees	0.76	1.07	0.031	1.10
Extra classes	0	7.53	7.53	25.70
School uniform	7.17	8.02	0.85	2.90
Stationery (exercise books, textbooks, pens, etc.)	6.05	7.0	0.95	3.20
Average total cost per child per household	32.74	62.06	29.32	100

Amount in Ghanaian cedis per term (Gh¢1.43 = US$1 at 2004 rate)

Source: The author (Field data, 2008).

Interviews with head teachers concerning household education expenditure revealed that schools levied fees in order to conduct special or 'super mock' [22] examinations for their final year JHS pupils. However, no charges were made for extra classes, following a directive from the GES to all public basic school heads instructing them not to collect any additional payment from parents for such tuition. Household heads, public school heads and teachers who were interviewed attested to the fact that no fees were charged for extra classes; although some teachers expressed the need for and willingness on their part to conduct extra classes if parents were willing to pay.

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[22] Super mock examination is the last internal exams conducted by the school prior to their final examination conducted by WAEC.

In the case of the LFPS, since attending extra classes and taking meals at school were compulsory, these costs items – along with tuition fees – remained the main direct costs of schooling. On the other hand, in terms of the public school, food, uniforms and stationery were the main costs; even though the percentage differential of the cost of uniforms and stationery between private and public is small, as indicated in Table 8.2.

The evidence thus indicates that apart from LFPS tuition fees, the difference between public and private schools in the average cost of education per child lay in extra class fees (26 per cent) and school meals (27 per cent). This is a clear indication that it was not the cost of tuition that made the LFPS more expensive, but rather the auxiliary costs of schooling, especially meals.

8.3 Is there a significant difference in the direct household costs of education between the LFPS and the public school?

About 26 per cent of the study's sample of households had chosen to send children to an LFPS, whilst 21 per cent had selected the combined option, enrolling their children in both private and public schools. However, the majority of the sample had enrolled their children in a public school (53 per cent); a statistical breakdown that is consistent with Harma's (2008) study in rural India. Overall, the selection of an LFPS was manifested across the whole range of households in the three communities under study (from the poorest to the richest households).

Not surprisingly, the vast majority (61 per cent) of households in the lowest income quintile utilised public schools. Given that about two fifths (38.85 per cent) of households in the lowest income quintile had made a school choice – with 23 per cent choosing private schooling only, and 15.83 per cent selecting the combined option (see Table 8.3) – it is important to determine whether there was much difference in the direct cost of education between the two school types, taking into account the fee-free education policy in respect of the public sector.

An independent sample t-test was conducted to compare means of direct household cost of schooling in terms of three key items: school uniform, stationery and school meals (see Table 8.4). The test also compared public and private education in terms of the average cost of schooling per child.

Table 8.3: Percentage distribution of households by income quintile and school type

Amount Gh¢	Quintile 1 208.02	Quintile 2 355.24	Quintile 3 518.74	Quintile 4 875.17	Quintile 5 1,909.04	All Households
Households	105	105	105	105	105	525
Household school preference						
Public	61.15	54.55	55.36	47.06	48.86	279
Private	23.02	27.27	25	22.69	30.68	135
Combined	15.83	18.18	19.64	30.25	20.46	111
Total	100	100	100	100	100	

Source: The author (Field data, 2008).

The results showed no statistically significant differences between public and private education in respect of expenditure on school uniform or textbooks and stationery. On the other hand, the higher cost of food in private school was statistically significant – public school: μ =17.46, Sd=11.3; and private school: μ =25.37, Sd=13.6 – although the magnitude of the mean variation (μ =7.81) was moderate (eta squared = 0.074). Average expenditure varied significantly, with public at μ =32.7, Sd=14.9; and private at μ =62.06, Sd=23.6. The average cost of enrolling a child in LFPS was greater than that of public school, the magnitude of the variation (μ =29.34) being very high (eta squared = 0.293). As expected, households that had opted for an LFPS incurred significantly higher direct costs per child than did those with their offspring in fee-free public school.

Table 8.4: Independent sample t-test comparison between public school and LFPS in terms of the direct cost of education, 2008 (in Ghanaian cedis; Gh¢1.43 = US$1 at 2004 rate)

Cost item	Public			Private			t (df)	Sig.
	N	Mean	SD	N	Mean	SD		
Food	292	17.46	11.3	133	25.27	13.6	5.80 (218)	0.000
School uniform	291	7.17	6.5	133	8.02	7.7	1.70 (221)	0.090
Textbooks & stationery	292	6.05	10.5	133	7.0	16.4	1.07 (182)	0.286
Average cost	272	32.74	14.9	126	62.06	23.6	12.8 (173)	0.000

Source: The author (Field data, 2008).   Note: equal variance not assumed.

The mean cost differential shows private education in the communities under study to be about twice as expensive as public schooling (see Table 8.3). Yet, such a cost differential notwithstanding, a sizeable proportion of households (about 40 per cent) in

the lowest income quintile were either among those that had chosen private schooling only or had selected the combined option (see Table 8.2). Given the relatively high direct cost of private education, we might infer that the majority of poor households that had opted for it had either chosen the least expensive private schools and/or were among those that had social networks of friends and relatives who were able to absorb private education costs and so were not so poor that it was unaffordable.

The Ghana National Education Campaign Coalition (GNECC, 2005) analysis of the education expenditure of an unrepresentative sample of 29 households in seven extremely deprived schools in catchment areas in Ga West District, both immediately preceding and following the implementation of the fee-free capitation grant policy in Ghana, provides further insight into the differences between household education expenditure under varying circumstances. Table 8.5 shows that the fee-free policy led to the removal of mandatory expenditure on schooling at both primary and JHS levels, such that households were freed from the obligation to provide annual levies, PTA dues, textbooks and examination fees.

Table 8.5: Comparison of annual household education expenditure in Ga West public basic schools before and after the introduction of the capitation grant in 2004/05 (in Ghanaian cedis; Gh¢1.43 = US$1 at 2004 rate)

Expenditure item	Pre-capitation grant primary school	Post-capitation grant primary school	Pre-capitation grant JHS	Post-capitation grant JHS
	Median	Median	Median	Median
Annual levy	2.9	0	2.5	0
Annual PTA dues	0.5	0	0.5	0
Examination fees	1.0	0	3.0	0
Textbooks	N/A	N/A	N/A	N/A
Stationery	8.0	8.0	3.2	3.2
Rules and geometry sets	0.9	0.9	1.0	1.0
School bags	4.5	4.5	5.0	5.0
School uniform	10.0	10.0	10.0	10.0
School meals	88.0	88.0	66.0	66.0
Total cost without school meals	28.1	23.4	25.2	19.2
Total cost with school meals	116.5	111.4	91.2	85.2

Source: GNECC (2005).

However, the cost of school meals remained the main component of the direct household cost of schooling in Ga West, constituting about 75 per cent of total expenditure on education at the primary level. This is consistent with GLSS 5 evidence (see Chapter 3); and also with the results of the case schools of the present study in rural Mfantseman (see Table 8.2), which, following interviews with poor household heads, found that the government's fee-free policy had effectively contributed to a substantial reduction in the burden of education. Indeed, all that households now needed to do was pay for school meals. When asked whether or not the fee-free policy had made schooling more accessible, one household head made the following comments:

> *Free education has really helped many children to go to school. Before capitation, even though they went to school, they were often sent home for the school fees; but now, no child is sent home for the fees… We just have to give a child money for food and they go to school.*

However, the general consensus that the fee-free policy had contributed to reducing the cost burden notwithstanding, some interviewees noted that some children still did not go to school due to the inability of their parents to provide them with their education needs, especially school meals. The following interview excerpt reflects the extent to which household heads believed that the fee-free policy had increased accessibility:

> *[The] fee-free [policy] has helped some parents to send their children to school… It is true that the government has removed fees, but it will not give us books, pens or even furniture. So, if the government is helping to send your child to school, it means that you must also help yourself; and if you are not working, you will not be able to do so. As I speak, some parents have never sent their children to school; and if you ask why, the parent will say that they don't have the money – there is probably no money to buy food for the child to go to school.*

As previously mentioned, the purchase of food at school was obligatory in respect of the LFPS, but not in the public education sector. However, several interviewed household heads indicated that if they are unable to provide their children with money for school meals or for food to take to school, they were reluctant to go. Clearly, the straitened circumstances of the household itself formed a barrier to access. This was because if a household could not provide its children with school meals, it made no difference whether this was in terms of public or private education.

It may be argued that the cost differential between public and private schools, as evidenced by the t-test results, was due to varying household demographics and socio-economic characteristics which influence household's ability to afford the cost of a school type. To test this, the determinants of education expenditure were examined using a standard regression technique.

8.4 What factors are associated with education expenditure in rural Mfantseman?

While Table 8.1 shows average household education expenses in terms of basic public school and LFPS, more can be learned by employing a standard regression technique to explain factors associated with education expenditure, controlling for other explanatory variables. To identify significant factors influencing household spending on schooling in rural Mfantseman, the log of total household expenditure on education per child was regressed on a variety of household and school variables (see Appendix 5 for description of explanatory variables). Table 8.6 shows the regression results.

The model as whole is statistically significant $F(15, 282) = 19.62$, p. < 0.001, indicating a strong correlation between education expenditure, and household and school characteristics. The $R^2 = 0.51$ reading indicates that 51 per cent of the variance in education expenditure is explained by the regression.

The regression result shows that the level of a household head's education is positive and statistically associated with educational expenditure, an indication that more educated household heads spend more than less educated on education. This is hardly surprising since there is a direct correlation between number of years of education and level of income; and the more highly educated a household head, the more value they were likely to place on education, and thus the more they spent on it for their children (Colclough, et al., 2003; Glewwe and Patrinos, 1999).

With regard to occupation, household agricultural activities had a significant negative impact on school expenses. Households whose main livelihood depended on own farm agriculture spend less on education than those not in that occupation. Considering that

the majority (nearly 70 per cent) of households in the sample were engaged in such small-scale farming (see chapter five), this is an interesting finding. It is probably explained by the subsistence nature of activities in the rural communities studied, which reduced household capacity to bear the cost of education and hence their ability to exercise school choice.

Table 8.6: Determinants of household expenditure on education at the basic level

	ln (total direct education expenditure per child)
Constant	3.55
	(0.17)
Household head characteristics	
Gender of household head	0.011
	(0.058)
Age of household head	-0.002
	(0.002)
Educational level of household head	0.016**
	(0.007)
Religion of household head (Christian =1)	0.141*
	(0.080)
Household characteristics	
Social network	-0.039
	(0.069)
Household assets (three or more = 1)	-0.063
	(0.102)
Occupation	
Household agricultural activities	-0.107* (0.059)
Petty trade/manufacture	-0.035 (0.053)
Major trade/manufacture	-0.113 (0.085)
Children in school	
No. of children actually in school	0.261***
	(0.052)
No. of children in public school	0.038
	(0.050)
No. of children in private school	0.065
	(0.044)
Household school choice	
Private school only	0.326***
	(0.105)
Public and private school	-0.325***
	(0.103)
Distance to school (km)	0.003
	(0.003)
Observations	298
R^2	0.51

Notes: *** = p. <0.01; ** = p. <0.05; * = p. <0.10. Figures in parenthesis = standard errors.

Source: The author (Field data, 2008).

The private school variable – the dummy variable – which indicates whether the child was in public or private school, has a significant (1 per cent) positive impact on school expenses – private school attendees spent more on education than their counterparts in public school. The private school variable is intended to be a more accurate indicator of marginal costs to households that transferred their children from public to private school (Glewwe and Patrinos, 1999). Thus, the coefficient of private school choice indicates that it cost a household almost 40 per cent more when they transferred a child from the public to the private education sector (i.e. $e^{0.326} = 1.385$). This reaffirms the fact that the LFPS was not an easy choice for the poorest households, especially those subsisting on very low and unstable sources of income.

On the other hand, the selection of the combined option had a significant negative impact on education expenditure, confirming the view that enrolling different children in both public and private school reduced the household's financial burden in comparison to those that enrolled all their children in an LFPS. However, it is important to note that approximately half the households (48.8%) in my sample that had chosen private education had just one child in school.

In order to entice households, LFPSs adopted strategies to induce demand from households interested in private schooling. In one particular private school, the total fees that a household paid was reduced for every additional child enrolled. A fourth child enrolled paid no fees. Two of the low-fee private schools encouraged households to enrol children between the ages of three to five for free in their pre-schools. This practice ensured that they had a stock of children ready to enter the fee paying stream. Households who were able to pay fees promptly and in full sometimes received a discount of 10% to 15%. These practices ensured that the low-fee private schools were able to recruit from among some of the poor households. In short, the LFPS operated in a way that maximised demand from households on very low earnings but had a preference for private education.

However, it is important to note that the reduction in the total cost of an LFPS education arising from the strategies adopted to attract more clients notwithstanding, the average cost per child in private school compared to those in public school was still substantially

high, as shown in Table 8.2. This raises the important question of how the poor were able to afford to send their children to LFPS given their relatively low income. This problem is explored in the next section.

8.5 How important is cost in determining the poor household's school choice?

The cost of education is clearly a significant factor in determining school choice. This is because choice has to do with the affordability of the various available school types (Harma, 2008). This section assesses the extent to which the poor could afford the cost and hence the choice of an LFPS. Firstly, the proportion of household income spent on education per child is analysed. Secondly, LFPS enrolment and fee data from the previous academic year are used to determine the fee arrears households owed to the LFPSs under study. Finally, interview data derived from poor household heads concerning their survival and management strategies are employed to examine the extent to which such strategies might have contributed to the sustained demand for private education.

8.5.1 The proportion of household income spent on education

To determine the proportion of household income expended on education, and taking into consideration whether a child was in public or private school, the household direct cost per child for these two school types was compared with the mean household income by quintile. Table 8.7 shows mean and median household income by quintile.

Table 8.7: Mean and Median annual household income by quintile (in Ghanaian cedis; Gh¢1.43 = US$1 at 2004 rate)

	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5
Mean household income	208.02	355.24	518.74	875.17	1,909.04
Median household income	222.00	360.00	540.00	900.00	1,575.00

Source: The author (Field Data, 2008).

A comparison of the average total cost per child at private – Gh¢62.06 – and at public school – Gh¢32.7 – (see Table 8.2) with the corresponding mean household income by quintile reveals that the enrolment of just one child in LFPS by a quintile 1 household would expend about a third (29.8 per cent) of its income. Given that in the communities

under study households on average had two school-age children (see Chapter 5), if both of them were enrolled in private school, this would consume the majority of their income. If a household had, for example, one child in public school and one in LFPS, the average cost would of course be lower than if they enrolled both of them in private school but this will still constitute about 45% of the poorest household income. And for those with all their children in public school, the requisite proportion of household income expenditure would be much less – about 16 per cent.

In terms of quintile 2 households, the proportion of income expenditure would be 17 per cent and 9 per cent for private and public school respectively; while for quintile 3 households, the proportions would be reduced to 12 per cent and 6 per cent for private and public school respectively. Those in quintile 4 could expect a further reduction to about 7 per cent for LFPS and 4 per cent for public school. With regard to the richest households in the community (quintile 5), the gap between the proportion of income expenditure on LFPS and public school would narrow even further to about 3 per cent and 1.7 per cent respectively.

Analysis of GLSS 5 data indicates that in terms of a household in quintile 1, a much lower proportion (16.5 per cent) of its income was expended on a child in private JHS (see Chapter 3). However, based on criteria suggested by Lewin (2007b) that no more than 10% of the poor households' income is expended on one child's education, the analysis show that households in quintiles 1–3 in rural Mfantseman spent more than 10 per cent of their income on just one child, corroborating the assertion that, in general terms, private education is beyond the financial means of the poor (Harma, 2008). Thus, for those poor households under study that chose private schooling, huge sacrifices and cutbacks on everyday necessities would be required. Clearly, the poor in this context had no real choice given the cost of private schooling relative to their income.

However, it emerged from my interviews with 38 household heads that while the introduction of the fee-free capitation grant to schools had reduced the cost burden of public education considerably, it might have had the unintended consequence of encouraging a few households to consider the combined school option. In effect, the 'savings' from the abolition of public school fees and the attractive proposition of the high quality of education offered by the LFPS created an interest in it.

8.5.2 LFPS enrolment and fee income

This section examines enrolment rates and fee data for three of the four LFPSs for the academic year immediately preceding the study (2008/09) in order to determine the extent to which expected revenue from fees matched actual receipt. Table 8.8 shows enrolment figures and fee income for these schools.

Of the total of 227 pupils enrolled in Shamo LFPS, only 1 had dropped out and overall fee arrears as a percentage of total expected revenue constituted just 3.26 per cent. At Holomo LFPS, 34 pupils of a total enrolment of 136 were in fee arrears, accounting for an overall total revenue deficit of Gh¢231.50. This amount (Gh¢231.50) represent about 11% of the projected income. Finally, at Fremo LFPS, 52 of its 187 pupils were in fee arrears, amounting to a total revenue deficit of Gh¢176 about 13% of the school's projected income. The difference in fee arrears in relation to the number of pupils per school whose households owed fees reflects the level of fees charged by each LFPS; for example, Holomo charged higher fees than did Fremo – fees ranged from Gh¢ 11 to Gh¢ 20 in Holomo compared to Gh¢ 6 to Gh¢ 10 charged by Fremo (see Appendix 8).

Table 8.8: Enrolment figures and fee revenue for three LFPSs, 2008/09 academic year (in Ghanaian cedis; Gh¢1.43 = US$1 at 2004 rate)

School	Total Enrolment	Number of pupils ever suspended pending payment of fees	Number of drop out	Amount owed by drop outs	Number in fee arrears	Expected fee revenue	Total amount in arrears	Total fee arrears as a percentage of total revenue
Shamo	227	92	1	7.50	8	2,069.50	67.50	3.26
Fremo	187	154	15	102.00	52	1,349.00	176.00	13.05
Holomo	136	40	11	28.00	34	2,120.00	231.50	10.92

Source: The author (Field data, 2010).

A plausible explanation for this differential fee level is that Holomo did not face such stiff competition compared to Fremo, which was subject to a greater degree of rivalry for pupils with other private schools in the education circuit.

As noted earlier, the fee arrears experienced by Fremo and Holomo amounted to about 13 per cent and 11 per cent of total fee revenue respectively, while the amount owed by drop out was 8 per cent of total expected fee revenue in each school respectively. Thus, if the fees owed by drop outs are added to the fee arrears, the total arrears as a percentage of overall expected revenue from fees was 20.16 per cent and 12.4 per cent at Fremo and Holomo respectively. Shamo experienced fee arrears of less than 4 per cent of its expected fee income; but at Holomo, the figure was about 10 per cent; while approximately 20 percent of Fremo's expected income was in arrears due to non-payment and drop out.

A follow up with eight of these drop out pupils' households revealed that two had dropped out because of illness, one had transferred to another school, while the remaining five were staying away on account of owing money for such items as tuition fees, extra classes and school meals. Even though this result is drawn from a small sample, it clearly signals that not all poor households could afford to maintain the costs of private schooling, a conclusion corroborated by the fact that many pupils were suspended pending the payment of school fees (see Table 8.8).

In Holomo LFPS, 40 per cent of pupils were suspended at least once pending the receipt of their fees; the figure was 41 per cent in Shambu; while Fremo, which had the lowest rate of fee arrears of all, apparently enjoyed a high degree of success by suspending about 82 per cent of its pupils until their fees were paid. According to teachers and heads of LFPSs, several pupils were suspended more than four times a term. In two schools, pupils who failed to pay their fees were caned, interviewees arguing that such 'punishment' made children put pressure on their parents to pay up. In respect of the poorest households, clearly financing their children's LFPS tuition was a difficult undertaking, meaning that, in the long term, it was highly probable that they would not sustain their demand for private schooling due to the high auxiliary costs enumerated in table 8.2.

8.5.3 Household survival and management strategies

In order to understand how the poor sustained their children's schooling, 12 household heads among the lowest income quintile were interviewed on their survival and

management strategies, given that a substantial proportion (30 per cent on LFPS) and (16 per cent on public school) of their income was spent on education.

One of the most frequently cited coping strategies was the purchase of education materials and food on credit, or the sale of personal belongings such as clothes in order to buy these items. Of the 12 household heads interviewed, 9 cited purchase on credit or sale of belongings. Harma (2009) also found similar practices amongst poor households in rural Uttar Pradesh, where households that could not easily afford the cost of private education had to cut back on other household necessities. Clearly, this source of education funding is not sustainable, and calls into question the continued enrolment of children from such households in private school.

Furthermore, in rural communities, the issue of inadequate access to credit – particularly amongst small-scale and peasant farmers – is well known (Mason and Rozelle, 1998). However, in rural Mfantseman, some households engaged in agriculture were able to access credit through advance loans from those who bought their farm produce. For example, in describing how they coped, one household head noted that,

> *Buyers of our farm produce sometimes pay us in advance before we harvest the crops for them. They also give us interest free loans and the produce from the farm is then used for repayment.*

This demonstrates that even though accessibility to credit was a major obstacle to the ability to engage in productive economic activity in the communities under study, some households were still able to raise the money to support their household budget. For many smallholders who did not have other sources of livelihood, obtaining money on credit was key to their survival. The benefits of this source of income notwithstanding, it could also have negative consequences in terms of the ability of the household to sustainably finance their children's education. This was because many of these households grew farm produce in order to meet their subsistence needs. A poor harvest, which was a common phenomenon in such rural areas – arising mainly from the traditional nature of farming – together with the small acreage of land holdings, drove them into a deeper cycle of poverty (GSS, 2005b). Clearly, the burden of education expenditure on such households would be enormous and, consequently, might have negatively affected their capacity to sustainably finance the education of their children.

Another coping strategy was the parental condoning of child labour – children engaged in casual farm work, petty trading or fishing during term time or the school holidays – to raise money in order to support their education. Children were allowed to travel to Mankessim during the school holidays to carry out petty trading; or to Half Assini, in Western Region, to fish. The income raised was used to help meet general household and education expenses.

One LFPS head teacher explained that children in his school who did not receive financial support from their parents were permitted to engage in casual labour one day a week in order to raise money to meet their schooling expenses. However, allowing pupils to work during term time could have serious consequences for the child's sustained school attendance and completion. For example, the Ghana child labour survey report (GSS, 2003) indicates that children who engage in long hours of employment tend to learn little because they are frequently absent from school or too tired to concentrate in class.

Some households depended on social networks of friends and relatives to provide food items or money to pay for schooling expenses. However, as indicated in chapter five, only about a fifth of the households under study depended on social networks for survival, leaving the vast majority with no such network. Thus, in situations in which the household was unable to obtain sufficient food, it was revealed that children went to school on empty stomachs, or else refused to go to school altogether.

The present study's affordability analysis demonstrated that the cost of education was important to the poor household's choice of schooling, finding that the LFPS was generally beyond the sustainable financial reach of the poor. The minority of poor households that did manage to enrol and keep their children in LFPS achieved it only by taking advantage of fee-reduction strategies by LFPSs and making stringent sacrifices. Interviews with households in the lowest income quintile revealed that management and survival strategies enabling the initial enrolment of a child in LFPS failed to provide a reliable source of funding: small-scale and unreliable sources of income such as subsistence farming and fishing simply did not raise enough money to sustain a pupil's private schooling for the whole basic education cycle.

Given that some households owed LFPS fee arrears in the range of between 10 and 20 per cent of the school's expected fee income, the question from the opposing point of view is whether the LFPS was able to raise sufficient income to sustain its operations. The next section examines the income and expenditure of the LFPS in order to understand whether it was a sustainable enterprise in the poor rural environment.

8.6 Operating the rural LFPS – how much room for expansion?

In the LFPSs income analysis earlier in this chapter (Table 8.8), it was established that of the three schools for which data was available, one had a fee income deficit of 20 per cent, while another experienced a 12 per cent shortfall arising from default in the

Table 8.9: Estimated LFPS recurrent/operational costs, 2008/09 academic year (in Ghanaian cedis; Gh¢1.43 = US$1 at 2004 rate)

Cost items	School		
	Holomo	Shamo	Fremo
Recurrent/operational costs			
Salary costs			
Salaries	2,320.00	2,400.00	1,493.8
Total	2,320.00	2,400.00	1,493.8
Non-salary costs			
Administration			
- Teachers' notebooks	49.05	50.00	84.00
- Class registers	10.00	16.00	14.50
- Chalk	25.20	120.00	60.00
- Pens	7.00	10.00	15.00
- Cardboard	6.00	10.00	9.00
- Poster paint	3.50	10.00	-
- Water	-	48.00	20.00
- Photocopying	3.00	10.00	9.00
- Refreshments (visitors)	50.00	50.00	5.00
- Transport (meetings)	150.00	50.00	10.00
- First aid (drugs)	10.00	130.00	30.00
- Annual registration fees	-	-	-
Textbooks			
- Social Studies	18.00	45.00	27.00
- Science	30.00	45.00	40.00
- Mathematics	18.00	45.00	37.00
- English Language	25.00	45.00	37.00
- Other books	68.00	30.00	20.00
Sports activities	-	210.00	60.00
Other expenses	-	150.00	105.00
Total	472.75	1,054.00	582.5.00
Grand Total			
(salary + non-salary costs)	**2,792.75**	**3,474.00**	**2,076.30**

Source: The author (Field data, 2010).

payment of fees and pupil drop out. Considering that such schools made a point of charging comparatively low fees in the first place, this raises the important question of how they were able to meet their operational costs.

An additional issue was that of balancing the books after operational costs were deducted from revenue. If there is no viable profit margin, concerns may well be raised about the long-term sustainability of low-fee private education in the poor rural environment. This was explored by comparing the estimated revenue of the three LFPSs under study with their estimated recurrent/operational costs. In addition, LFPS teachers were interviewed on the challenges they faced in their various schools.

Table 8.9 shows the estimated costs of operating the three LFPSs. In Holomo, salaries amounted to Gh¢2,320, representing about 83 per cent of its total operational costs. The corresponding figures for Fremo were Gh¢1,349.80, 72 per cent of total operational costs; while at Shamo, they were Gh¢2,400, 69 per cent of total operational costs. Of the three schools, Shamo spent less in percentage terms on salaries simply because it paid its teachers less – the mean basic monthly salary at Shamo was Gh¢23.00, compared to Holomo and Fremo, which paid mean salaries of Gh¢37.00 and Gh¢31.00 respectively (Table 8.10).

Table 8.10: Monthly income per teacher in three rural LFPSs, 2010 (in Ghanaian cedis; Gh¢1.43 = US$1 at 2004 rate)

	Holomo			Shamo			Fremo		
	Salary	Other	Total	Salary	Other	Total	Salary	Other	Total
Mean	37.00	20.00	57.00	23.00	20.00	43.00	31.00	20.00	51.00
Mode	30.00	20.00	50.00	23.00	20.00	43.00	30.00	20.00	50.00
Minimum	30.00	-	-	23.00	-	-	11.25	-	-
Maximum	60.00	-	-	23.00	-	-	60.00	-	-
Teachers			12			11			12[23]

Source: The author (Field data, 2010).

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[23] The head was trained and two other members of staff were taking a distance learning teacher training course. Holomo and Shamo had no trained teachers.

In addition to a basic monthly salary, teachers received additional income from the daily collection of extra classes fees, meaning that gross monthly income per teacher in Holomo, Fremo and Shamo averaged at around Gh¢57.00, Gh¢51.00 and Gh¢43.00 respectively. However, the high mean monthly salaries enjoyed by teachers at Holomo were explained by its proprietor and head teacher's comparatively high remuneration. The modal monthly salary in respect of teachers at Holomo shows that their gross monthly remuneration was about Gh¢50.00.

Yet, these rates of pay were still far below that an LFPS teacher would have earned if they were paid the national minimum daily wage of Gh¢3.11, which it was by law mandatory for employers to pay their employees. Such flouting of the law was commonplace in the LFPS sector and proprietors got away with it. Table 8.11 shows the estimated monthly salary an LFPS teacher would have received if paid the minimum wage. It is evident that if such teachers had been paid even the 2010 minimum daily wage of Gh¢3.11 (assuming a month to be an average of 28 days), their monthly salary would have been Gh¢87.08, Gh¢30.00 more than that paid at the time of the study. Nevertheless, this also indicates that remunerating LFPS teachers on the basis of the minimum wage would have meant that the salary cost to the school would have almost doubled and hence drastically further reduced any profit margin it actually enjoyed.

Table 8.11: Estimated LFPS teachers' monthly income, based on daily 2010 minimum wage (in Ghanaian cedis; Gh¢1.43 = US$1 at 2004 rate)

School	Minimum daily wage	Monthly wage Per teacher	Total number of teachers	Total monthly wage
Holomo	3.11	87.08	12	1,044.96
Shamo	3.11	87.08	11	957.88
Fremo	3.11	87.08	12	1,044.96

Source: The author (Field data, 2010).

Comparative data on public school and LFPS teachers' salaries show that mean monthly income for those employed by an LFPS is about one sixth that of a trained public school teacher's salary, and about a third of what an untrained teacher in the public education sector can expect to earn (see table 8.12). However, since LFPS teachers did not have access to a union that could have fought for better wages on their behalf, LFPS owners

had no reason not to continue to remunerate their teachers poorly; since they too were struggling to make ends meet.

Table 8.12 shows public school teachers' salaries, from which the significant conclusion can be drawn that the relatively low remuneration of LFPS teachers in comparison to their public school counterparts notwithstanding, salaries still accounted for a significant proportion of the total operational costs of the private school. The question of whether LFPSs in rural areas raised sufficient revenue to sustain the running of their enterprises highlighted earlier in this chapter is next explored on a school-by-school basis, comparing revenue and operating costs.

Table 8.12: A public school teacher's monthly salary, 2010 (in Ghanaian cedis; Gh¢1.43 = US$1 at 2004 rate)

School	Medico		Domino		Kyoto	
Qualification	Trained teacher	Untrained teacher	Trained teacher	Untrained teacher	Trained teacher	Untrained teacher
Mean	349.00	177.00	233.42	99.90	342.60	177.75
Mode	330.00	-	-	109.19	321.00	172.00
Minimum	152.00	-	153.00	72.02	321.00	144.00
Maximum	594.40	-	417.79	109.19	386.00	196.00
Number of teachers	8	1	11	4	3	8
Subtotal	2,656.00	177.00	2,567.64	399.59	1,028.00	1,398.00
Grand total	2,833.00		2,967.23		7,278.00	

Source: Computed from data on the remuneration of public school teachers.

In terms of the LFPSs under study, given an average extra tuition fee of Gh¢7.66 per pupil, per term (see table 8.2), and assuming that no child was absent for a single day from any of the three schools – and thus paid for the maximum number of extra classes – the total revenue from extra tuition would have been equal to the total termly enrolment multiplied by the cost of extra classes for each pupil. Therefore, at Holomo the total revenue from extra tuition would have been Gh¢1,041.76; at Shamo the amount would have been Gh¢1,738.82; and Fremo's revenue would have amounted to

Gh¢1,432.42. If this income is added to the expected revenue from standard tuition fees, total revenue and operating costs can be compared. Table 8.13 shows this data.

The revenue and costs data in table 8.13 show that all three LFPSs under study made a profit. However, all three interviewed head teachers also complained of the difficulties they faced in paying teachers' salaries, due in the main to defaults on and irregular payment of fees. In some cases, children had transferred to public school or else had dropped out of the education system altogether, which further reduced the LFPSs' anticipated revenue.

Table 8.13: Estimated LFPS revenue and operating costs for term 1, 2008/09 (in Ghanaian cedis; Gh¢1.43 = US$1 at 2004 rate)

Revenue/cost	Holomo	Shamo	Fremo
Tuition fees[24] (A)	2,120.00	2,069.50	1,349.00
Extra classes (B)	1,041.76	1,738.82	1, 432.42
Total school revenue (A+B)	3,161.76	3,808.32	2,781.42
Total operational cost (D)	2,792.75	3,474.00	2,076.30
Surplus/deficit [(A+B)-D]	369.01	334.32	705.12
Minus lost revenue due to drop out pupil	28.00	7.50	102.00
Minus fee arrears	231.50	67.50	176.00
Surplus	**109.51**	**259.32**	**427.12**

Source: The author (Field data, 2010).

In effect, these private schools might have barely been remaining operational. The difficulty in paying salaries each month could also explain why there was such a high teacher turnover in the three LFPSs under study, as indicated in table 8.14.

In all the LFPSs for which data were available, there was evidence of a high rate of teacher turnover. For example, in 2007, 30 percent of teachers at Holomo, 50 percent of

[24] See table 8.8 for school fee revenue.

all those at Shamo, and 71 percent of those at Shambu left their respective schools. Similarly, in 2008, 50 per cent, 40 per cent and 50 per cent of teachers at Holomo, Shamo and Shambu respectively resigned. In 2009, 30 per cent of teachers at both Holomo and Shamo, and more than 44 per cent of those at Shambu left.

Although there was only data on teacher turnover from three of the eight registered LFPSs in the district (see table 8.14), the evidence clearly shows that if a similar pattern to that observed in these three schools was manifested in the other LFPSs, a further concern about the long-term viability of private education in the rural setting is raised.

Table 8.14: Teacher turnover in rural LFPSs (2007/09)

Year	Number of teachers			Number resignations			Resignation as a percentage of the total annual complement of teachers		
	Holomo	Shamo	Shambu	Holomo	Shamo	Shambu	Holomo	Shamo	Shambu
2007	10	12	7	3	6	5	30	50	71
2008	10	10	6	5	4	3	50	40	50
2009	12	12	9	4	4	4	33	33	44

Source: The author (Field data, 2010).

In order to gain a deeper insight into the challenges that LFPS teachers faced in their schools, five members of staff were interviewed; with at least one from each of the four LFPSs under study. Analysis of interview data found that poor salaries posed a great challenge to teachers' economic survival. Additionally, at all of the LFPSs, teachers and head teachers acknowledged the irregular nature of the payment of their salaries – they all suffered salary arrears of between two and three months. Interviewees also noted that arrears were often paid in instalments, making it difficult for them to manage their finances effectively.

A former LFPS head who at the time of the study was working as an ordinary private school teacher noted that the biggest challenge the school had faced, and was still facing, was the retention of teachers. The high teacher turnover was attributed to very low salaries arising from low enrolment and the inability of some parents to pay the fees. Thus, teachers tended only to stay in the job from between six month and a year; after which they resigned in order to look for better employment opportunities

elsewhere, leaving behind classes without teachers. In such circumstances, those who remained in post were forced to teach multigrade classes.

Even though it has been suggested that in areas in which it is difficult to recruit staff and enrolments are low, multigrade teaching should be seen as a viable option (Little, 2006), unfortunately, LFPS teachers were generally untrained and therefore lacked the necessary skills to teach such classes. Two heads who were interviewed informally admitted that their teachers were reluctant to combine classes because they found it difficult to manage two or three different grades at the same time. The implication of such a situation is that even if teachers agreed to take multigrade classes, there was a good chance that some pupils were silently excluded from lessons.

All LFPS teacher interviewees said that they wished to leave their schools for jobs in the public education sector or else move to the city where there were better job opportunities, citing two reasons for their decision. Firstly, they noted that they would not get a pension if they taught in an LFPS all their working lives. One interviewee who had taught in an LFPS for four years noted that his reason for planning to leave the school was not only due to the low salary but that he also needed to consider his retirement, commenting, '*If I spend 50 years in private school, I still won't get a pension.*'

Secondly, teachers cited long-term job security as another reason for wanting to leave, pointing out the collapse of two LFPSs in the in the community. In all the communities under study, there was evidence that between 2007 and 2009, several LFPSs had closed. One interviewee, a teacher in Shambu mentioned Holy Heart International School and Ama Atta Aidoo International School as examples of enterprises in their communities that had gone bust, and listed low enrolment rates; insufficient teachers; pupil attrition to public school; and non-payment of fees at Shambu LFPS as factors that all combined to make the future of the school extremely uncertain.

The above analyses show that LFPSs would have to overcome enormous challenges, principally the need to secure the custom of sufficient households prepared to enrol their children and pay school fees regularly, if these enterprises were to remain viable. Moreover, even though the estimate of LFPS income and expenditure indicated that the

three schools under study were making a profit, interviews with teachers revealed salary arrears ranging between two and three months, adding that all that actually sustained them was their daily income from extra tuition.

Yet, it is equally clear from the analysis that these schools were not generating sufficient revenue from households but rather, all that was keeping them in business was the exploitation of their teachers through poor wages begrudgingly paid in instalments. Such a situation had serious implications for the long-term sustainability of the LFPS.

8.7 Summary

The evidence discussed in this chapter has shown that the cost of education plays an important role in the poor household's access to and choice of school. The study found that households spent on average about Gh¢33 and Gh¢62 per term on public school and LFPS respectively. Payment for tuition, extra classes, food and uniform were the main direct costs of schooling. However, given that fees constituted 13 per cent of private schooling costs, and principal direct household expenditure was in the form of auxiliary costs, an incentive was created for the poor to choose private education as it was perceived to offer better value for money.

The study also found that even though public schooling was supposed to be free of charge, there was evidence that households were obliged to make some payment, which was sometimes in excess of that paid in the form of legitimate fees to the LFPS. Moreover, even though the statistical analysis showed a significant difference between the cost of food at public school and that at LFPS, qualitative evidence from poor households revealed that the cost of school meals remained the main barrier to access to both public and private school.

Households who enrolled their children in both public and private school were able to spread the cost of their education expenditure and hence reduce the burden on the household. However, the fact that some of the poorest households in the sample had enrolled at least one of their children in an LFPS does not necessarily mean that all those in this income quintile could afford such schools or were willing to send their children to them. It would appear that those committed to giving some of their children

a private education were helped to meet the cost by taking advantage of LFPS profit-maximising strategies and falling back on assistance from their social networks. It is notable that all household members interviewed indicated that they would much rather there had been a more accountable and good quality public school system that was also truly fee free.

The assessment of the degree to which cost influenced the poor in their choice of schooling indicated that a sizeable proportion of their income was spent on education. Almost two thirds of the households under study in the lowest income group (quintile 1) had enrolled their children in public school, spending an average of about 16 per cent of their household income on education per child. This means that for a sizeable proportion (about 61 per cent) of households in the lowest income group, access to public basic education came at a great price.

The qualitative evidence showed that poor households that chose private schooling employed a number of management and survival strategies, but these were not sustainable or reliable sources of funding. In addition, analysis of the payment of private school fees indicated that this was often not a smooth process, as all the schools were obliged to periodically suspend pupils pending the payment of fees – sometimes more than four times a term. In some schools, children who reported for class without having paid their fees were caned. This is clear evidence that these poor households could not afford the costs of private schooling on a sustainable basis, even after utilising all the fee-reduction and coping strategies available to them.

Finally, the analysis of LFPS income and expenditure indicated that high levels of teacher turnover; the non-payment of fees; and the poor working conditions of teachers, coupled with evidence of the collapse of four LFPSs in the communities under study, means that there is a high degree of probability that such schools are not sustainable in the long term.

Chapter 9: Conclusion

Exploring the contribution and limits of private basic education

9.1 Introduction

This chapter summarises the findings of the study and highlights the key contributions of the thesis. It also discusses policy implications, lessons learnt and areas for further research.

In developing countries, the provision of schooling has been the responsibility of the state, a principle that arises from the view that education is a public good. As a result, many such countries have embarked on fee-free basic education policies. In Ghana, for example, the fee-free education policy that was implemented in 2005 was aimed at ensuring that children from poor households were not denied access to education due to prohibitively expensive school fees.

Nevertheless, recent evidence suggests a burgeoning low-fee private education sector in poor areas of many developing countries. Indeed, GLSS data show that an increasing number of poor households in rural areas of Ghana enrolled their children in LFPSs between 1991/92 and 2005/06 (see chapter 3); a clear indication that the prospect of good value private education holds significant interest for the nation's poor.

While such interest in the LFPS might appear to be a surprising development, some commentators (Tooley, 2005; 2009; Tooley and Dixon, 2007a) have heralded its increasing popularity as a positive innovation that signals the best chance for the poor to gain a reasonable quality of education. However, since the level of access to and choice of schooling available to the poor household are influenced by considerations other than simply the means to pay basic tuition fees, this thesis set out to investigate the full range of factors that determine the accessibility of the LFPS to the poor in rural areas. The findings and contribution of the study are summarised in the following section.

9.2 Revisiting the claims and evidence – the findings and contribution

The element of cost is central to the issue of the poor household's access to education and its degree of school choice. Evidence from the study's analysis shows that there was a significant difference between direct household costs incurred in respect of children in public school compared to those in LFPS, an indication that the fee-free capitation grant policy applied to public basic schools contributed to reducing the cost burden of households.

Analysis of national data on household schooling expenses (see chapter 3) shows that when a rural household enrols a child in LFPS, it costs about two and half times more than it does for a child in public school; annual expenditure on school meals constituting the most significant drain on the household budget. The evidence from the communities under study corroborates this statistic – schooling cost a household almost twice as much when it enrolled a child in LFPS.

Yet, it is important to note that the principle of fee-free schooling did not mean that it literally cost the household nothing when it enrolled its children in public school. Uniform and stationery, for example, constituted about 20 per cent of the overall direct costs of schooling. However, of all the various education costs incurred by households, the study found that school meals constituted the most significant cost item and contributory factor in the barrier to access for the poor in terms of both public school and LFPS.

Although the purchase of food was not obligatory at public school, the evidence suggests that pupils from the poorest households who did not have the means to eat at school were reluctant to go at all. Therefore, even though school meals were more expensive in private school than in public, the issue of school meals was not a matter of public or private school choice but concerned the economic well-being of the household making this finding a significant contribution of the thesis.

Descriptive evidence from the GLSS shows that the cost of enrolling each child in a rural private JHS constitutes about 16 per cent of household income; and, therefore, in terms of affordability, this is also a huge burden on the poor. An assessment of the

importance of cost to poor household access and choice of schooling in the communities under study revealed that enrolling a child in a rural public school came at a great price, as the household would need to spend about 16 per cent of its income to educate just one child. On the other hand, the accessibility of the LFPS in the communities under study was assessed from three perspectives: typical quintile 1 income, household management and survival strategies, and school revenue.

It is clear from the descriptive data that households in quintiles one to three spent more than ten per cent of their income on education. Analysis of the income of the LFPSs under study also shows that some households were in a chronic state of fee arrears, constituting about 10 to 20 per cent of fee income in two of the schools. Additionally, qualitative interviews with quintile 1 household heads revealed that the management and survival strategies the poor adopted to finance their choice of private schooling were not sustainable. In effect, all three perspectives used in assessing the importance of cost to private school choice show consistency with national data, that is, the LFPS was not an affordable option for the poor. This means that the minority of poor households that did choose private schooling were forced to make stringent sacrifices.

The quality of private education is key to its continued demand by the poor. This is because if fee-paying private schools are unable to provide a significantly better quality of education than their fee-free public counterparts, demand for the LFPS may decline and hence affect its sustainability. The results of the GSS (2005a) and MOESS (2006) indicate that private schools perform better in examinations than do public schools. Analysis of national data on the examination results of educationally deprived schools in 53 districts of Ghana show that between 2005 and 2008 that the modal grade score of both public and private schools in mathematics was 5 and given that the private schools in these districts are mainly high fee and selective, this result is quite surprising. However, in terms of overall score in BECE, private schools consistently scored higher in the BECE in comparison to their public counterparts (see chapter 3). But this result does not control for the socio-economic background of children. Moreover, the BECE exam results data do not reflect the performance of the typical rural LFPS, as most of the country's private schools are in urban or peri-urban areas, selective in their enrolment, and also charge high fees. This consideration prompted a comparative analysis of the inputs and examination/test results of both public and private schools in

some typical poor rural communities of the district under study. The results show that, even though some LFPSs did not do better than public school in exam or test performance, on the whole LFPSs performed better in BECE examination compared to public schools.

However, public schools in the communities under study had more substantial and better quality inputs than their private counterparts; the only advantage that the LFPSs enjoyed was their relatively low PTR. This finding is consistent with national data showing that public schools on average have a larger complement of better-trained staff, as well as a higher quality of teaching and learning materials than do private schools in educationally deprived districts. Clearly, public schools have not delivered on the basis of the inputs they have.

More importantly, the LFPSs under study had deplorable school infrastructure, classrooms generally being made of bamboo or wood with palm branches as roofing; and some of them were even forced to hold classes under trees. Clearly, such structures not only posed health and safety concerns, but would also have had a detrimental effect on learning in areas in which heavy downpours were commonplace, especially during the rainy season.

Descriptive analyses of public school and LFPS BECE results in similar rural settings generally do provide evidence of the superior performance of the private education sector. However, the comparative analysis also shows that both school types might perform either well or poorly depending on the community. Interviews with head teachers of LFPSs involved in the study reveal that, the selection of best candidates for exam in addition to the provision of extra classes accounted for the LFPSs' relatively better performance in BECE. Beside, school classroom observation on teacher contact time with students and interviews with parents with children in both public and private schools show that low achievement in public schools is simply the result of pupils not being taught.

Moreover, the regression analysis of English and Mathematics tests does not reveal better performance on the part of the LFPS (a conclusion reached after controlling for pupils' backgrounds). Therefore, although the general perception that the private school

offers a better quality of education is based on rational thinking, it is not borne out by the evidence; and it may be concluded that – unlike in urban and peri-urban areas – any belief to the contrary in respect of the LFPS in the study rural communities needs to be taken with caution. However, interview data show that parents' indices of quality were based on better BECE exams results, teacher commitment to teaching, child discipline and the practice of child seeking by LFPS. These were practices which were not given much consideration in the study rural public schools. Thus, parents' indices of quality together with their high aspirations fuelled the poor household's interest in private education, making this finding a significant contribution of the thesis.

School choice is dependent on the ability of the household to meet the cost. Nevertheless, Tooley and Dixon (2007a) claim that Ghana's poor are able to access the LFPS. Yet, evidence from the communities under study show that it is not the typical poor household that chooses private education. Even though these were poor rural communities, households that accessed an LFPS were relatively better off than their neighbours.

This is demonstrated by the fact that of the 105 lowest income quintile households under study, the majority (61 per cent) chose public school only. Only a minority (39 per cent) – consisting of those that chose LFPS only (24 per cent) and those that selected the combined option (15 per cent) – were able to access an LFPS. Furthermore, such households were only able to do so because of the way in which these private schools operated: flexible payment terms such as fee waiver, fee discount and a fee-free policy at the pre-school level. In addition, households that were poor but had a social network of friends and relatives in a position to assist with schooling expenses were also able to access the LFPS. This finding is a key contribution of the thesis.

Qualitative evidence based school observations and the views of poor household heads indicates that practices and processes in the LFPS in terms of the discipline of teachers and pupils; commitment to teaching; and use of instructional time were some factors that attracted poor households to these schools. However, LFPSs were found to habitually break the laws relating to minimum wage, beating of pupils in fee arrears and use of corporal punishment that violated fundamental human rights of their pupils.

The study also presents new evidence on households that employed the strategy of enrolling some of their children in LFPS and the others in public school (the combined option), a phenomenon that appears to be little documented in the literature on private education to date. As indicated earlier, the study sampled about 15 per cent of households in the lowest income quintile that had some children in public school and some in LFPS. When households made such a strategic school choice it tended to give children different educational opportunities and this may have implication for family cohesion due to the inequality it creates among the children.

It has been argued that in regions in which government provision is unable to adequately absorb all school-age children, the LFPSs may be utilised to plug the gap. Consequently, Tooley (2005) suggests the need for the state to support such schools. However, the present study's comparative analysis of the estimated revenue and operational costs of the LFPSs under study shows that even though in some instances a profit appears to have been made, in all the schools for which data was available teacher interviewees revealed that they were owed unpaid salary or were remunerated between two and three months in arrears.

To give an idea of the exploitation that is rife in the LFPS sector, public education sector salary estimates indicate that if public schools were to employ only untrained teachers, they could employ six such members of staff for the cost of one trained teacher, but this would certainly not be an effective strategy for development. Moreover, if the country's minimum wage legislation were properly enforced, many rural LFPSs would find that meeting their operational costs would be a challenge. LFPS teachers are mostly untrained and as long as they are paid less than one sixth of the salary of a trained public school teacher, their employers may be able to remain in business and continue to charge low fees.

However, LFPS teachers are disadvantaged in other ways too: they have no career path or professional development structure, and little stability in their jobs due to the low and irregular payment of salaries, as clearly indicated by the high teacher turnover in the schools under study. Since continuity is a significant element of career development, high teacher turnover and the fact that in all the communities a number of LFPSs had closed down while new ones emerged, suggests that the LFPS in a poor rural setting

may not be a sustainable enterprise in the long term, and therefore is able to provide neither job security for its teachers nor a durable education solution for the poor.

Finally, it is often argued that in a marketised economic environment, private sector provision flourishes. As a result, the growing marketisation of education through private sector provision in some developing countries has been associated with the liberal economic environment in such countries. In Ghana, for example, the post independence education policies were driven by a socialist agenda of state ownership and control, which stifled growth of private education provision in the country. But as the Ghanaian economy became more liberalised from the late 1980s, public funding on education was reduced, and the way was paved for greater private sector participation in education. Rapid expansion of private sector provision in basic education began after the implementation of the 1992 constitution which gave individuals right to establish and maintain private schools at their own expense (MOE/GES, 2001). Evidence from the GLSS 3 data in 1991 show that, only 0.5 percent of the rural poor in Ghana enrolled in private school and by GLSS 5 in 2005 this has increased to about 10 percent (see chapter 3).

The growth in private school participation in Ghana, like many other developing countries, has been heralded by some who argue that, it would promote choice and competition and therefore improve quality and ensure equity (Forsey, et. al., 2008; Tooley, 2009; Tan, 1998; Plank and Sykes, 2003). However, school choice may not promote equity if private schools draw their clients (pupils) mainly from those from a higher socio-economic background. The evidence from this thesis show that even within the poor rural environment, it is the relatively better off, certainly not the poorest group, which are likely to choose private schools for their children. Majority of the poor still are priced out of low-fee private schools because of the costs, and those who are able to access them, do so with great difficulty. An education growth strategy to achieve EFA through expansion of low-fee private schools in rural areas in that case is likely to be anti-equity. If the strategy for expanding access requires public investment in the low-fee private sector, then LFPSs in rural settings must be made to operate in ways that do not conflict with the achievement of education for all. As this thesis has shown, this cannot be assumed to be the case since those who have the strong voice –

rural households with better social and economic capital, choose private school for their children, leaving out the majority poor whose voices are weak in the public sector. This could have implication for quality public education provision in the rural setting and therefore hinder the achievement of education for all.

9.3 Is low-fee private education a viable option for the poor? Policy implications

This thesis presents a number of policy implications and indicates various strategies the government might adopt to address some of the findings of the study. The evidence suggests that the LFPSs are not accessible to the poorest because the majority of those that take advantage of their services are from socio-economically better off households. As a result, when Tooley (2005) argues that the money used in public schools should be redirected to privately run schools on sub contracts , my argument is that this would not be in the best interests of the poor, since supporting such schools would ultimately only benefit those households that are relatively well off and not the true poor. Therefore, in environments like the communities under study, it would be more beneficial to the poor if existing state schools were improved.

Nevertheless, the low level of professionalism and indiscipline shown by some public school teachers and their pupils, in addition to the perception in rural communities that the LFPSs offer better quality, suggests that the policy of fee-free education in Ghana needs to do more than that which the capitation grant alone offers; fee-free education must be built on an incentivising foundation that makes public schools more accountable to local communities and district authorities than it currently exists.

For example, public schools should be made accountable for the way in which they utilise the capitation grant to improve access and quality and, together with the community and district GES, set targets for improvement. In addition, the GES should consider introducing the sociology of living and working in a rural environment onto its teacher training curriculum in order to help prepare teachers to appreciate the scope of expectations amongst rural populations in terms of teachers and the schooling of their children. District assemblies along with the GES should also educate rural communities in the modalities of the various types of school available to them so that households are able to make informed decisions on the best school choice for their children.

Further, by improving the professional practice of public school teachers and encouraging schools to be more child-friendly and child-seeking would potentially help to redeem their image in the rural areas. This could be achieved if the Ghana Education Service (GES) worked closely with communities to make rural public schools more accountable through regular supervision and monitoring of teachers in order to improve school practices such as discipline and the more effective use of instructional time; all of which contributed to negative perceptions of public school.

The fact that LFPSs in the rural communities under study had poor school infrastructure that was a health and safety risk to pupils suggests the need for operational regulation. In addition, pupil discipline enforcement processes in LFPSs – including the carrying of stones and sand – constitute a clear violation of the fundamental human rights of the child. Therefore, legislation should be drafted to address LFPS operations in rural communities that bring them under the umbrella of state policy to improve access for all – by ensuring that both public schools and LFPSs are bound by similar regulatory and accountability standards. This may help the proprietors of the latter to operate in a way that improves their sense of responsiveness to the expectations of local communities, and safeguards pupils and their parents against abuse and exploitation of their teachers.

Additionally, it has been established from GLSS data analysis corroborated by the present study, that the price of school meals rather than the payment of tuition fees constitute the highest education cost item for households. Since the cost of food in both public school and LFPS is high relative to other education expenses, coupled with the fact that children from the poorest households may withdraw from school if they are unable to eat there, suggests that in poor communities, access could be improved if the food cost barrier were removed. Accordingly, the provision of free school meals would greatly reduce the burden on poor households; and, together with improved systems of quality accountability, this would redress the balance in demand for public school education.

Furthermore, some commentators such as Tooley and Dixon (2007a), and Tooley (2005), have argued that the LFPS provides a service that addresses a need. This argument is particularly relevant in regions in which government provision is inadequate for the absorption of all school-age children. Therefore, the interest shown

by some relatively poor rural households in LFPS education suggests that the state must support these schools in keeping their costs down. In practical terms, this might mean supplying them with textbooks and other instructional materials. However, in my sample LFPS, there was no evidence of plugging gaps. This is because children who had been enrolled in an LFPS were those who would have otherwise gone to a public school. Moreover, the question of whether or not the state needs to support a school should be based on evidence of sustainability. This is because in the communities under study, there was documented evidence of the collapse of a number of LFPSs, while some new ones also sprang up. Clearly, the uncertain lifespan of the LFPS in poor rural areas such as Mfantseman suggests that this type of school may not provide a secure avenue of access to education for the poor, given that it could close down at any time, leaving the pupils of such schools stranded before they had completed their educational journey.

Finally, the EMIS data collected by the GES only captures those schools that are registered with it. As a result, private schools that are not recognised by the GES are not included in the annual school mapping exercise. Therefore, it is necessary for the GES to include both registered and unregistered LFPSs in this exercise to facilitate a better understanding of their expansion and relative costs; and private school data would also be a significant input in policy planning.

9.4 Limitations of the study

One limitation of this study is restricted coverage of the research area. This is due to the fact that of a total of eight education circuits in the district, only two were selected for the study. Consequently, only four out of eight LFPSs in the district were taken into account. Moreover, the wide dispersal of settlements and lack of accessible roads to many villages meant that as a lone researcher, I was unable to sample all the communities given limited resources and time. Nevertheless, analysis of national data on household education expenses and school inputs provided a broader context that enabled me to compare the results of my small sampling with countrywide statistics.

A second limitation is related to the design of the household survey instrument. A major flaw was the way in which household education expenses data were gathered – information was based on enrolment at either public school only or private school only. However, without data relating to the third choice – households that selected the combined option – it was difficult to estimate the education expenses of this category. This flaw notwithstanding, the data derived from the use of the survey instrument led me to some clear conclusions in terms of household education costs.

9.5 What lessons might improve demand for public school in areas also hosting LFPSs?

During the course of interviews and classroom observations, I came to realise that it was what was going on in the school environment – the practices and processes in the various school types – that were the significant factors in determining the household's reaction to the school. It was clear that the way in which the LFPS interacted with households – going from house to house urging parents to enrol their children in their school; visiting pupils at home when they had been absent from school for few days – encouraged parents to think of them as taking an interest in their welfare and for that matter, their children's education. Additionally, school practices such as teacher discipline and the more effective use of instructional time by the LFPS attracted the interest of households. Public schools could learn from this mode of interaction, and school practices and process in order to expand and sustain demand for state education.

9.6 Recommendations for further research

The implementation of the fee-free policy in all Ghanaian public basic schools from 2005 seems to have yielded some dividends – as evidenced by the significant expansion in access to education during the past decade (Akyeampong, 2009; Rolleston, 2009). However, this improvement appears to have failed to ensure horizontal equity in education access – the poor and those in rural areas still lag behind in terms of overall access to education. Therefore, research is needed to explain the factors that contribute to this inequity, and to identify ways to bridge the access gap.

Furthermore, given that LFPSs are increasing in number (see chapter 3), it is anticipated that an MOES/GES longitudinal study and census of all private schools – particularly

those in poor areas of the country – irrespective of status would provide important information on number, years of operation, rate of expansion, number of new enterprises and number of those that close. This would provide information necessary for the understanding of LFPS growth patterns and the real contribution to basic education access made by this type of school, data that would be invaluable in policy planning.

9.7 Conclusions

Claims of the widespread access of poor households to the LFPS appear to have been exaggerated. Evidence from the communities under study suggests that LFPSs might be accessible to children from better-off socio-economic backgrounds, but the majority of households in the research area have no real choice. Even the minority of poor households that do choose private education for their children are only able to do so because schools offer manipulative if favourable terms in the form of flexible fee practices.

Nevertheless, paying tuition fees and other school expenses for the duration of the basic education cycle cannot be sustained by the poor due to low, unreliable and unstable income. In addition, the perception that the LFPS provides a better quality of education relative to the public school in a similar environment is not supported by the evidence. Rather, it is a belief in the superior quality of the LFPS combined with the poor household's greater aspirations for its children that fuel interest in private schooling.

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Appendices

Appendix 1: T-test comparing the BECE results of public and private schools in educationally deprived district of Ghana

Aggregate results,2005

```
Two-sample t test with equal variances
    Group |     Obs       Mean    Std. Err.   Std. Dev.    [95% Conf. Interval]
        1 |   23310    30.88288   .0587015   8.962313 30.76782 30.99794
        2 |    7910    27.96688   .1071921   9.533468 27.75675 28.177
 combined |   31220    30.14407   .0520574   9.198116 30.04204 30.24611
     diff |            2.916006   .1185481            2.683647 3.148365
     diff = mean(1) - mean(2)                   t =  24.5977
Ho: diff = 0                            degrees of freedom =    31218
    Ha: diff < 0             Ha: diff != 0                  Ha: diff > 0
 Pr(T < t) = 1.0000   Pr(|T| > |t|) = 0.0000        Pr(T > t) = 0.0000
```

Maths results, 2005

```
Two-sample t test with equal variances
    Group |     Obs       Mean    Std. Err.   Std. Dev.    [95% Conf. Interval]
        1 |   23036    5.484112   .0110105   1.671129  5.462531 5.505693
        2 |    7816    5.129478   .0200736   1.77467   5.090128 5.168828
 combined |   30852    5.394269   .0097065   1.704919  5.375244 5.413295
     diff |            .3546338   .0222266             .3110689  .3981988
     diff = mean(1) - mean(2)                   t =  15.9554
Ho: diff = 0                            degrees of freedom =    30850
    Ha: diff < 0             Ha: diff != 0                  Ha: diff > 0
 Pr(T < t) = 1.0000   Pr(|T| > |t|) = 0.0000        Pr(T > t) = 0.0000
```

English results, 2005

```
Two-sample t test with equal variances
```

Group	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf. Interval]
1	23034	5.609186	.0104838	1.591121	5.588637 5.629735
2	7820	5.003325	.0179413	1.586566	4.968155 5.038495
combined	30854	5.45563	.0091751	1.611637	5.437646 5.473613
diff		.6058616	.0208092		.5650747 .6466486

```
    diff = mean(1) - mean(2)                  t =  29.1150
Ho: diff = 0                         degrees of freedom =    30852

    Ha: diff < 0            Ha: diff != 0                Ha: diff > 0
 Pr(T < t) = 1.0000   Pr(|T| > |t|) = 0.0000         Pr(T > t) = 0.0000
```

Aggregate results, 2006

```
Two-sample t test with equal variances
```

Group	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf. Interval]
1	51748	31.55256	.0408927	9.302346	31.47241 31.63271
2	10653	25.57308	.0998487	10.30572	25.37736 25.7688
combined	62401	30.53175	.0390084	9.744367	30.4553 30.60821
diff		5.979484	.1008728		5.781774 6.177195

```
    diff = mean(1) - mean(2)                  t =  59.2775
Ho: diff = 0                         degrees of freedom =    62399

    Ha: diff < 0            Ha: diff != 0                Ha: diff > 0
 Pr(T < t) = 1.0000   Pr(|T| > |t|) = 0.0000         Pr(T > t) = 0.0000
```

Maths results, 2006

Two-sample t test with equal variances

Group	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf. Interval]
1	50830	5.480602	.0080918	1.824332	5.464742 5.496462
2	10438	4.585265	.017794	1.817948	4.550386 4.620145
combined	61268	5.328067	.0074904	1.854043	5.313386 5.342748
diff		.8953366	.0195927		.856935 .9337383

diff = mean(1) - mean(2)   t =   45.6976

Ho: diff = 0   degrees of freedom =   61266

   Ha: diff < 0   Ha: diff != 0   Ha: diff > 0
 Pr(T < t) = 1.0000   Pr(|T| > |t|) = 0.0000   Pr(T > t) = 0.0000

English results, 2006

Two-sample t test with equal variances

Group	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf. Interval]
1	50987	5.978955	.0072145	1.629047	5.964815 5.993096
2	10457	4.81773	.0164565	1.682832	4.785472 4.849988
combined	61444	5.781329	.0068398	1.695435	5.767923 5.794735
diff		1.161226	.0175876		1.126754 1.195697

diff = mean(1) - mean(2)   t =   66.0253

Ho: diff = 0   degrees of freedom =   61442

   Ha: diff < 0   Ha: diff != 0   Ha: diff > 0
 Pr(T < t) = 1.0000   Pr(|T| > |t|) = 0.0000   Pr(T > t) = 0.0000

Aggregate results, 2007

```
Two-sample t test with equal variances
    Group |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
        1 |   10512    31.54195    .0886872    9.092928    31.36811 31.7158
        2 |    2984    26.84417    .1830865    10.00128    26.48518 27.20316
 combined |   13496    30.50326    .0818023    9.503159    30.34292 30.6636
     diff |             4.697783    .1929334                4.319607 5.07596
     diff = mean(1) - mean(2)              t =  24.3492
 Ho: diff = 0                        degrees of freedom =    13494
     Ha: diff < 0          a: diff != 0                  Ha: diff > 0
 Pr(T < t) = 1.0000     Pr(|T| > |t|) = 0.0000    Pr(T > t) = 0.0000
```

Maths results, 2007

```
Two-sample t test with equal variances
    Group |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
        1 |   10386    5.599942    .0176149    1.795162    5.565414 5.634471
        2 |    2928    5.028347    .0355263    1.922361    4.958688 5.098006
 combined |   13314    5.474238    .0159389    1.839126    5.442995 5.50548
     diff |             .5715952    .0381631                .4967902 .6464003
     diff = mean(1) - mean(2)              t =  14.9777
 Ho: diff = 0                        degrees of freedom =    13312
     Ha: diff < 0        Ha: diff != 0                  Ha: diff > 0
 Pr(T < t) = 1.0000   Pr(|T| > |t|) = 0.0000            Pr(T > t) = 0.0000
```

English results, 2007

```
Two-sample t test with equal variances
    Group |      Obs        Mean     Std. Err.    Std. Dev.    [95% Conf. Interval]
        1 |    10397    5.788978    .0157707    1.608073    5.758064 5.819891
        2 |     2930    4.776451    .0293537    1.588901    4.718894 4.834007
 combined |    13327    5.566369    .0143598    1.657736    5.538222 5.594516
     diff |             1.012527    .0335467                .9467708 1.078283
     diff = mean(1) - mean(2)                    t =   30.1826
Ho: diff = 0                          degrees of freedom =     13325
    Ha: diff < 0         Ha: diff != 0                     Ha: diff > 0
 Pr(T < t) = 1.0000   Pr(|T| > |t|) = 0.0000        Pr(T > t) = 0.0000
```

Aggregate results, 2008

```
Two-sample t test with equal variances
    Group |      Obs        Mean     Std. Err.    Std. Dev.    [95% Conf. Interval]
        1 |    52988    32.15539    .0381364    8.778675    32.08065 32.23014
        2 |    12544    25.96508    .0885713    9.919981    25.79147 26.1387
 combined |    65532    30.97046    .0364529    9.331659    30.89901 31.0419
     diff |             6.190311    .0894467                6.014995 6.365626
     diff = mean(1) - mean(2)                    t =   69.2067
Ho: diff = 0                          degrees of freedom =     65530
    Ha: diff < 0           Ha: diff != 0                     Ha: diff > 0
 Pr(T < t) = 1.0000      Pr(|T| > |t|) = 0.0000    Pr(T > t) = 0.0000
```

Maths results, 2008

```
Two-sample t test with equal variances
    Group |      Obs        Mean    Std. Err.    Std. Dev.    [95% Conf. Interval]
        1 |    52571    5.591695    .0072923    1.672016    5.577402 5.605988
        2 |    12421    4.867482    .0165913    1.849095    4.834961 4.900004
 combined |    64992    5.453287    .0067894    1.730847    5.439979 5.466594
     diff |             .7242126    .0170327                .6908285 .7575966
     diff = mean(1) - mean(2)                    t =   42.5190
Ho: diff = 0                       degrees of freedom =     64990
    Ha: diff < 0         Ha: diff != 0                      Ha: diff > 0
 Pr(T < t) = 1.0000   Pr(|T| > |t|) = 0.0000          Pr(T > t) = 0.0000
```

English results, 2008

```
Two-sample t test with equal variances
    Group |      Obs        Mean    Std. Err.    Std. Dev.    [95% Conf.
Interval]
        1 |    52579    6.022062    .0069597    1.595874    6.008421 6.035703
        2 |    12419    4.837185    .0156054    1.739075    4.806596 4.867774
 combined |    64998    5.795671    .0066276    1.689678    5.782681 5.808661
     diff |             1.184877    .0162048                1.153116 1.216638
     diff = mean(1) - mean(2)                    t =   73.1191
Ho: diff = 0                       degrees of freedom =     64996
   Ha: diff < 0         Ha: diff != 0                      Ha: diff > 0
 Pr(T < t) = 1.0000   Pr(|T| > |t|) = 0.0000          Pr(T > t) = 0.0000
```

Appendix 2: Household survey instrument

Please provide data required in this questionnaire as accurately as possible. Data supplied will be treated with <u>outmost confidentiality</u>. The data is for DPhil thesis and will purely be used in determining household schooling costs, poverty and school choice of public and private rural schools in the Mfantsiman District.

1. Household No………………………………………………. Full household address, including description of location and approach
----

    Contact tel no. (if available) .... Date of interview (DATE)………………………………….

    Name of interviewer (INTNAME)…………………………… Village/town name (VILLNAME)……………………………

SECTION 1: HOUSEHOLD ROSTER of RESIDENT MEMBERS. List all individual household members who meet <u>*all four*</u> of the following criteria

1) they lived under this roof or within same compound/homestead (use relevant terms)at least 15 days out of past year and
2) when they are together, they share food from the same kitchen/source, and
3) they contribute to or share in a common resource pool and
4) slept in this compound/homestead/ at least 15 days out of the past month (this condition is noted in order to include domestic servants aged 5-1 who work and sleep in this compound)

Household Roster – demographic and basic education details

ID code	Name	Relation to HH head	Sex	Date of Birth*	Marital Status	Current Education Status	Highest level education completed	Main occupation	Occupation sector	ID spouse	ID father	ID mother
1	2	3	4	5	6	7	8	9	10	11	12	13

Column 3 relation to Head of Household	Column 6 Marital Status	Column 8 Highest Grade Completed	
1=self	1= never married	1=none	**Column 10 Occupation sector (CREATE countries need to specify – categories below may or may not meet the normal classification of Occupation sectors used in country **)**
2= spouse of head	2= currently married	2=pre-school	
3= married child	3= widowed	3=grade 1 primary (or NFE equivalent)	Government
4=spouse of married child	4= divorced	4=grade 2 primary (or NFE equivalent)	
5= unmarried child (biological)	5=separated	5=grade 3 primary (or NFE equivalent)6= *continue filling out these grades with terms that match the relevant education system*	Private/self
6= unmarried child fostered/being cared for			NGO
7= unmarried child adopted	**Column 7 Current Education Status**		Semi-government
8= grandchild	1=never enrolled in pre-school, primary or primary NFE	**Column 9 Main occupation**	
9=father/mother	2=currently enrolled in pre-school/preschool NFE, primary, primary NFE or lower secondary/NFE	**ISCO codes need to be created (AL to do more work on this – and teams to match country codes against ISCO)**	***date of birth** very important for 3-16. For others, age in years is sufficient
10= father in law/mother in law	3.=completed schooling		
11=brother/sister	4. senior high school 1		
12=brother in law/sister in law/other relative			
13=servants/employees/other non relative			

Section 2: School Expenses of children aged 5-16 years

ID	Name	Grade of Student	How does…. Get to school? 1. Walks to school 2. Public transport 3. Driven to school	How far is the school away (estimate in km)	How much did it cost for …. to travel from home to school and back last week?	Last week how much did it cost to provide…. with food whilst at school?	How much was …. school tuition fees last term?	How much was PTA dues for ……..last term?	How much does a school uniform cost?
79	80	81	82	83	84	85	86	87	88

ID	Name	Last term how much was spent on examination fees for…..?	Last term how much was spent on extra classes for……?	This year how much has been spent on paying for school uniforms for….?	Last term how much was spent on exercise books, textbooks, pencils etc for …….?	Altogether how much does it cost to send **** to school each term?	Last term how were…… education expenses paid for? 1.Parents/guardian of the child 2.Scholarship 3.Resources provided by child 4.Remittance from someone else 5. Other
		89	90	91	92	93	94

Section 3: Economic Status of Household

4a Dwelling and services

ID	Dwelling *Appropriate alternatives needed*	Living Rooms How many rooms does the dwelling have*	Ownership Does the household own this dwelling or rent it	Water Distance How far do household members have to go (one way) to fetch water?	Water Source What is the source of water most often used in this household for drinking?	Does the water used for drinking come from the same source as the water used for bathing and washing?	Sanitation. What kind of toilet does the household use? *(CREATE teams to fill out appropriate alternatives)*	Energy Is this household connected to electricity supply?	Cooking What fuel is used for cooking?
	1. Separate house 2. Semi-detached house 3. Flat / apartment 4. Huts 5. Hotel/Hostel 6. Tent 7. Improvised house(kiosk) 8. Living quarters attached to office/shop 9. Other	Number	1. Owns it fully 2. Owns it, on mortgage 3. Rents it 4. Family property	1. Less than 20 meters 2. 20m – less than 100 m 3. 100m – less than 500m 4. 500m – less than 1 km 5. 1 km – less than 3 km 6. 3 km or more	Piped into dwelling or compound Public tap Borehole Protected well Unprotected well Rain water River, lake, pond, stream Dam Vendor, truck, sachet water, Others ………….	Mostly yes Sometimes Mostly no	Flush toilet Pit latrine KVIP Bucket None/use fields etc	Yes No	Dung Wood Coal Gas Electricity

* Excluding bathrooms, toilets and passages but including kitchens, dining rooms, lounges and bedrooms (NROOMS)

Section 4a Dwelling Asset ownership

I have a list of items which someone in the household may own. Which of the following does *any* member of the household own?

!D	Asset	Asset code	Yes/No	Asset	Asset code	Yes/No
10	Bed	1		TV		
11	Table	2		Telephone		
12	Stove/cooker	3		Mobile phone		
13	Refrigerator	4		Computer		
14	Fan	5		Bicycle		
15	Wall clock	6		Motor bike/rickshaw		
16	Wrist watch	7		Car		
17	Sewing machine	8		Books other than school books		
18	Radio	9		Light source for homework		

Section 4b: Household Livelihood and Non-employment Income

What are the sources of livelihood of this household (in cash and in kind). Circle all that apply

ID				
	Own farm activities	1	Collection/foraging	8
	Casual labour in agriculture	2	Charity/alms	9
	Casual labour (non agriculture)	3	Safety net/poverty schemes	10
	Wage/salary employment in agriculture	4	Interest on income/property/land rent etc	11
	Wage/salary employment in non agriculture	5	Public transfers/pensions/child support grants	12
	Runs Petty business/trade/manufacture	6	Private transfers/remittance from within country	13
	Runs Major business/trade/manufacture	7	Private transfers/remittance from abroad	14
			Other (Specify)	15

Then ask 'which are the THREE most important in terms of the income they generate'.

Write codes in the space provided

ID		Code	Approximate monthly income			
	1st most important activity (write code)					
	2nd most important activity (write code)					
	3rd most important activity (write code)					
	Other					
	Total monthly income					

Section 4c: Shocks to the Household

ID	Has anyone in the household suffered any serious injuries in the past year (name injury)	Has anyone in the household suffered any serious illness in the past year (name illness)	Have any of the following events occurred in the household in the past year (circle)	Please indicate if any events have had an adverse effect on your children's education and if so what was the effect?
			1.Loss of job 2.Death 3.Divorce 4.Major theft 5.Fire 6.Flood 7.Drought 8.Arrest 9.Other trauma	

SECTION 5: Social networks of Adult Household members (Household head and primary care-giver)

1. In the last 12 months have you been an active member of any of the following types of *groups* in your community?

ID Code	Name	Work/ Trade Union Y/N	Community Assoc/Coop Y/N	WomensGroup Y/N	Political Organisation Y/N	Religious Organisation Y/N	Credit/ Funeral Club Y/N	Sports Y/N

2. In the last 12 months did you receive any help from these *groups* related to your children's education. This can be emotional help, economic help or assistance in helping you to know or do things?

ID Code	Name	Work/Trade Union Y/N. If yes, specify	Community Assoc/Coop Y/N. If yes, specify	Women's Group Y/N. If yes, specify	Political Y/N. If yes, specify	Religious Organisations Y/N. If yes, specify	Credit/ Funeral Y/N. If yes, specify	Sports Y/N. If yes, specify

3. In the last 12 months, have you received any help or support from any of the following people for your children's education. This can be emotional help, economic help or assistance in helping you to know or do things?

ID Code	Name	Family Y/N If yes, specify	Neighbours Y/N If yes, specify	Other friends Y/N If yes, specify	Community leaders Y/N If yes, specify	Religious leaders Y/N If yes, specify	Politicians Y/N If yes, specify	Government officials Y/N If yes, specify	Charities NGOs etc Y/N If yes, specify	Other Y/N If yes, specify

Appendix 3: Interview Guide

3-1: The considerations informing household school choice decision

Household understanding of education as a 'commodity for investment' and how they analyze this investment

1. What motivated you to send ......X........ to School? Probe identify the value household attach to education

2. What does the family loses by sending ...X...   to school (working on the farm / trading income, etc). Probe for specific examples. Do households calculate this loss? How do they estimate the loss?

3. What does the family/household see as a benefit from sending ... X... to school? Probe to find out why and how they arrive at that decision.

Households schooling decisions and investment choices

1. Why have you chosen to enrol .....X ..... in public / private school?

2. How did you learn about this school? Probe to find out whether 'interpersonal network' (word of mouth, talking to others) or 'formal network' (published test results, public meeting, etc) were key in arriving at the decision. Also, find out whether household has social network including relatives, friends and any group that provide them with economic support.

3. If you could change your child's current school (say public to private/ or private to public) will you take the chance? Why?

4. What are some of the considerations that guided you in choosing a public / private school for your child?

5. How much does it cost the family to provide the following in a month? Help household to estimate this:

     Income.....................................?
     Expenditure on food................?
     Other specify...........................?

Direct subsidy to poor households

1. What do you know about the capitation grant?

2. In your opinion, do you think the capitation grant has made schooling more accessible? Probe for explanations and specific examples

3. If the government were to give the capitation grant of (Gh 3 cedis /30,000) to you , would have sent   X   his/her current school? Why? Probe to determine what household expect government to do with subsidies.

4. If government decides now to pay part of your child's school fees (irrespective of whether in public or private school) which of these schools would you enrol your child? Probe further to find out how much household are willing to pay if government is willing to provide them with direct subsidy and why they will be willing or unwilling to pay.

5. What other ways can the government support the education of children to ensure that they enrol and stay on in school?

3-2: Managing and surviving strategies of households in the lowest income quintile

1. How is your household able to pay for the child or children's educational expenses? (probe to find out how household meet this expenses)

2. How to do the household survive given the amount you spend on education? (Probe to find out household surviving strategies)

3-3:Challenges of teachers teaching in Low fee private school

1. How many years have been teaching in this school? How long would you continue to teach in this school and why?

2. What are some of the things you like most about teaching in this school?

3. What are some of the things you do not like about teaching in this school?

3-4: Interaction between households and schools

Household heads/ Head teachers / Teachers

1. What is the nature of interaction between parents and public/private schools? Do parents in each school type think they are getting value for money?

Household heads

i. Are you happy with the school your child attends? Probe eg why children are in a particular school.

ii. Have you ever gone to the school to talk to the head teacher about issues concerning child's schooling? Why not?

iii. How did the school respond?

iv. How do the household heads feel in the way they are valued?

2. head teachers/teachers:

i. Questions - do you have parents coming in to see you? What do you discuss? /Why not? Have you made an attempt to see them yourself?

ii. What is it that (Public/Private) schools do, if a child does not come to school?

Probe -ask school heads whether when their pupils do not come to school they go round to see them? Why? What will make you do that?

3. SMC/PTA Chair/Members
How do parents understand the value of private schooling in relation to public provision in this locality?
i. What do you think makes private schooling popular among some households?
ii.What do you think the school needs in order to improve its exam results?
iii.What are some of the things that you find in the (1) public school (2) private school that

Appendix 4: Description of explanatory variables for household school choice

Household Head Characteristics	
Gender	Indicator variable for household head's gender (female is reference category)
Age	Household head age in years
Education	Household head years of education
Religion	Indicator variable for religion - Christian =1, other =0
Household Characteristics	
Social network	Indicator variable for household receiving support from friends and relatives (Cash and in kind=1, No support=0)
Household expenditure per child	Household schooling expenditure per child in Ghana Cedis per term
Distance to school	Distance from home to school in kilometres
Occupation	A set of binary indicator variables for occupation of household-
	Own farm agriculture =1, 0ther =0
	Casual labour in agriculture =1, other =0
	Casual labour in non-agriculture=1, other =0
	Wage Salary in agriculture =1, other =0
	Wage Salary in non-agriculture =1, other =0
	Petty trader =1, other =0
	Major trader =1, other=0
Child Characteristics	
Children in school	Number of children in the household actually in school
Gender of child	Indicator variable for child's gender (female is reference category)

Appendix 5: Description of explanatory variables for educational expenditure

Household Head Characteristics	
Gender of household head	Indicator variable for household head's gender (female is reference category)
Age	Age in years
Education	Years of schooling
Religion	Indicator variable for religion - Christian =1, other =0
Household Characteristics	
Social network	Indicator variable for household receiving support from friends and relatives (Cash and in kind=1, No support=0)
Household Assets	Indicator variable of household owning three or more household durable assets (Three or more assets=1, less three assets=0
Occupation of household	A set of indicator variables for occupation of household
	Own farm agriculture =1, 0ther =0
	Petty trader =1, other =0
	Major trader =1, other =0
Children in school	
Children in public school	Number of children in household actually in school
Children in private school	Number of children in household in public school
	Number of children in household in private school
School characteristics	
Private	Indicator variable of public or private - with public school being the reference category.
Mixed	Indicator variable of public or mixed with public being the reference category
Distance to school	Distance in kilometres

Appendix 6: Description of explanatory variables for test performance and progress

Child characteristics	
Sex	Indicator variable of student (reference category female
Age	Age in years
Over age years	Years of being over age
Fostering	Indicator variable, fostered =1, other =0
Pre-school years	Years spent in pre-school
Age of entry	Age in years f entry into in primary
Private tuition outside home	Indicator variable, private tuition=1, other
Household literacy test sum	Household head total score in literacy test
Household water distance	Distance in kilometres

Household Occupation/ Livelihood	*Household indicator variables*
Farming	Household in farming =1, other=0
Casual labour	Household in casual labour=1, other=0
Household wages/salaries in employment	Earn wages/salary = 1, other=0
Household wages/salaries in non-agric	Earn wages/salary in non-agric=1, other=1
Household runs petty trade	Runs petty trade =1, other =0
Household runs major trde	Runs major trade=1, other=0
Foraging	Foraging =1, other=0
Charity/alms	Charity/alms =1, other=0
Safety net	Safety net =1, other=0
Private transfer within	Private transfer within Ghana=1, other=1

Schools	
Public rural primary Kokodo	Public primary school
Public rural JHS Kokodo	Public JHS
Public rural primary Akoma	Public primary
Public rural JHS Akoma	Public JHS
Private rural primary Kokodo	Private primary
Public rural primary Eku	Public primary
Public rural JHS Eku	Public JHS
Private rural primary Eku	Private primary
Private rural JHS Eku	Private JHS
Private rural JHS kokodo	Private JHS

Appendix 7: Teaching Time-table of Classes observed

1. Public School Teaching Time Table

Days	Class/Grade	7:40-8:00	8:00-8:30	8:30-9:00	9:00-9:30	9:30-9:45	9:45-10:15	10:15-10:45	10:45-11:15	11:15-11:45	11:45-12:15	12:15-12:45	12:45-1:15	1:15-1:45	1:45 PM
Monday	1	ASSEMBLY/REGISTRATION	MATHS		LIBRARY	BREAK	LANGUAGE & LIT			ICT	BREAK	INT. SCIENCE		SCH. BASED ASSESSMENT	CLOSSING
	4		ENGLISH		MATHS		PHYSICAL EDUCATION .(P.E)			INT SC.		LANGUAGE & LIT		CREATIVE ARTS EDU.	
	6		ENGLISH		MATHS		PHYSICAL EDU.			INT. SC.		GHANAIAN LANGUAGE		C.E.D	
Tuesday	1		MATHS		P. .E		LANGUAGE & LIT		CA			CA	INT SC.		
	4		P. E.		ICT/CA		MATHS		ENGLISH			GHANAIAN LANGUAGE		LIBRARY	
	6		P. E.		ICT/CA		MATHS		GHANAIAN LANGUAGE			C. A		S. B. A.	
Wednesday	1		WORSHIP		P. E		MATHS	ICT	NCS			LANGUAGE & LIT			
	4				ENGLISH		INT. SCIENCE		MATHS			C. A.		S.B.A	
	6				ENGLISH		INT. SCIENCE		C. E. D			C. A.	C. A.	S.B.A	
Thursday	1		MATHS		ICT/CA		LANGUAGE & LIT		C. A.			C. A.	INT SCIENCE		
	4		C. E. D.		P. E.		GH LANG		INT. SCIENCE			C. A.		ICT/ENG	
	6		MATHS		C. E. D.		GH LANG		INT SCIENCE			C. A.		ENGLISH	
Friday	1		P. E.		S. B. A.		LANG & LIT		LIB			MATHS		C. A.	
	4		MATHS		C. E. D.		INT SC	ICT	GH LAN	ENGLISH		C. A.		S.B.A	
	6		MATHS		C. E. D.		ENG	ICT	C. A.	ENGLISH		C. A.		S. B. A	

2. **Low-Fee Private School Teaching Time Table**

	Class/Grade	8:15-9:15	9:15-10:15	10:15-11:00	11:00-12:00	12:00-1:00	1:00-2:00	2:00-3:00
Monday	1	Maths	Library		Language/Literature	ICT		SBA
	4	Language & Literacy	Maths		Oral English	Natural Science		Creative Art
	6	Integrated Science	ICT		English	Maths		Maths
Tuesday	1	Maths	P.E		Language/Literature	Creative Art		Natural Science
	4	Languate and Literacy	Oral English		Creative Art	ICT		Maths
	6	Citizenship Education	Fante	BREAK TIME	Integrated Science	English Language	BREAK TIME	ICT
Wednesday	1	WORSHIP	P.E		Maths	Natural Science		English Language
	4	WORSHIP	ICT		Maths	English Lang.		Natural Science
	6	WORSHIP	Maths		Creative Art	Citizenship		Fante
Thursday	1	Maths	ICT		English Language	Creative Art		Natural Science
	4	Maths	ICT		Oral English	Maths		ICT
	6	Citizenship	English Language		Integrated Science	ICT		Creative Art
Friday	1	PE	SBA		English Language	ICT		Library
	4	ICT	Creative Art		Natural Science	Oral English		Language & Lit
	6	Fante	Creative Art		Citizenship Educ.	Maths		English Language

Appendix 8: Enrolment and fee income of LFPSs

1. Number of Pupils enrolled in Holomo and Fee Payment (Ghana cedis), Last Term 2008/2009

Class/ Grade	Fee Per Child (Gh cedis)	Total Number of children in class	Number of children ever sent home for fees	Number dropped out	Fees owed by dropped out	How many are in fee arrears and	Expected fee revenue	Total Amount in arrears	Fee arrears as a % of total expected revenue
1	11.00	13	5	1		2	143	4.00	1.73
2	11.00	17	2	-		7	187	102.50	44.28
3	11.00	14	4	1		5	154	16.00	6.91
4	14.00	12	5	3	Gh8	4	168	32.00	13.82
5	15.00	17	7	2		4	255	29.00	12.53
6	15.00	18	4	-		4	270	14.00	6.05
7	15.00	14	5	1		-	210	-	0.00
8	17.00	29	6	3	Gh20	6	493	27.00	11.66
9	20.00	12	2	-		2	240	7.00	3.02
Total		136	40	11		34	2,120	231.50	10.92

Source: Field Data, 2010

2. **Number of Pupils enrolled in Fremo Preparatory and Fee Payment (Ghana cedis), Last Term 2008/2009**

Class/ Grade	Fee Per Child (Gh cedis)	Total Number of children in class	Number of children ever sent home for fees	How many dropped out	Fees owed by dropped out (Gh cedis)	How many pupils are in fee arrears (Gh cedis)	Expected fee revenue (Gh cedis)	Total Amount in arrears	Total in fee arrears as a % of total
1	6.00	35	20	2	30.00	11.00	210.00	9.00	4.29
2	6.00	20	20	3	15.00	6.00	120.00	10.00	8.33
3	6.00	25	20	2	9.00	7.00	150.00	8.00	5.33
4	7.00	23	23	2	7.00	6.00	161.00	25.00	15.53
5	7.00	27	25	2	2.00	6.00	189.00	20.00	10.58
6	7.00	17	10	1	-	5.00	119.00	20.00	11.66
7	10.00	18	17	1	25.00	7.00	180.00	58.00	3.02
8	10.00	9	9	1	4.00	2.00	90.00	18.00	10.92
9	10.00	13	10	1	10.00	2.00	130.00	8.00	6.15
Total		187	154	15	102.00	52.00	1,349	176.00	13.05

3. Table: Number of Pupils enrolled in Shamo Preparatory and Fee Payment (Ghana cedis), Last Term 2008/2009

Class/ Grade	Fee Per Child (Gh cedis)	Total Number of children in class	Number of children ever sent home for fees	Number dropped out	Fees owed by dropped out	Number in fee arrears	Expected fee revenue	Total Amount in arrears	Total in fee arrears as a % of total
1	7.50	32	12	0	0	2	240.00	7.50	3.13
2	7.50	21	4	1	7.50	1	157.50	7.50	4.76
3	7.50	23	11	0	0	0	172.50	10.00	5.80
4	8.50	24	6	0	0	4	204.00	36.00	17.65
5	8.50	30	10	0	0	0	255.00	0	0
6	8.50	25	8	0	0	0	212.50	0	0
7	11.50	27	13	0	0	0	310.50	0	0
8	11.50	33	20	0	0	0	379.50	0	0
9	11.50	12	8	0	0	1	138.00	6.50	4.71
Total		227	92	1	7.50	8	2,069.5	67.50	3.26

*studies fees collected daily are not included in this table

Appendix 9: School Inputs of Public and Private schools

School Type			
Name of school			
Input Variables			
Teacher qualification *Number ....* No. trained .... No. untrained			
Teacher Monthly Salary Average trained Average untrained			
Pupil Teacher Ratio *Total enrolled Primary ....* PTR Primary .... *Total enrolled JHS...................* *Total of teachers.......................* PTR Junior High School			
Type of school building Wooden structure................... Mud house........................... Cement/concrete building.... Other types (specify)............			
Number of classrooms (cement Block) Primary School .... Junior High School JHS).........			

Appendix 10: A model of costs of a typical rural school

Salary Cost	Public	Private
	Recurrent costs	Recurrent costs
Monthly		
Other allowances		
Total		
Non-salary costs 1. Administration 　-Teacher notebooks .... 　-Class registers............................. 　- Chalks... 　- Pens .... 　-Card board................................... 　- Poster colours............................. 　-water/ from bore hole .... 　-Photocopies .... 　-refreshment for visitors .... 　-transport (meetings) .... 　- Photocopies .... 　-First Aid (Drugs) .... 　- Annual registration fee .... 2. Textbooks 　-Social studies .... 　-Science .... 　-Maths .... 　-English .... 　-other books .... 3. Sporting activities............................ 4. Other expenses		
Total		

Appendix 11: Teacher qualification, salary and PTR

School..	
Teacher qualification *Total number of teachers*	....
No. trained..............................	....
No. untrained	....
Gross Monthly Salary Trained 1....................................... 2....................................... 3....................................... 4....................................... 5....................................... 6....................................... 7....................................... 8....................................... 9....................................... Average .... Untrained 1....................................... 2....................................... 3....................................... 4....................................... 5....................................... 6....................................... 7....................................... 8....................................... Average	
Pupil Teacher Ratio *Total enrolled Primary* .... PTR Primary .... *Total enrolled JHS*................. *Total of teachers*.................... PTR Junior High School	

Appendix 12: School Building

School	
Type of school building Wooden structure Mud house Cement/concrete building Other types (specify)	
Number of classrooms (cement Block) Primary School .... Junior High School (JHS).........	

Appendix 13: Report on teacher contact time in LFPS and rural public school

Teacher contact time in LFPS

Primary/Grade 1	Primary/Grade 4	Primary/Grade 6
Day 1 – Teacher gives exercises to children in the morning but no engagement with them. In the afternoon teacher spends the rest of the time teaching rhymes. Time lost: 27 minutes.	Day 1 – Teacher spends 2 hours allocated to 2 subjects in teaching 1. Teacher is absent from class for 30 minutes. Excess time usage: 1 hour; teaching time lost: 30 minutes.	Day1 – Teacher spends 2 hours on a subject instead of 1. Teacher spends 12 minutes writing out an exercise and 38 minutes writing notes on the board. Excessive time usage: 1 hour.
Day 2 - Teacher spends 1 hour 20 minutes checking books and 25 minutes doing nothing. Time lost: 1 hour 45 minutes.	Day 2 – Teacher sits in class doing nothing, losing 25 minutes. Teacher spends 45 minutes writing test questions on the board in the morning, and another 1 hour in the afternoon. Comes to class 10 minutes late. Time lost: 45 minutes.	Day 2 – Teacher spends 1 hour 20 minutes setting test questions; 17 minutes writing questions on the board; 1 hour marking class test; 10 minutes praying; and 1 hour mending a bamboo fence. Total time lost: 1 hour 10 minutes, but also excessive time usage.
Day 3 – Morning religious worship overruns by 1 hour, taking up 15 minutes of teaching time. Teacher is in class but no teaching or exercises given to pupils for 45 minutes. Time lost: 1 hour.	Day 3 – Religious worship overruns by 15 minutes. Teacher spends 24 minutes writing questions on the board and 40 minutes marking a class test. Teacher utilises 2 periods for 1 subject instead of 2 and spends 17 minutes again writing a class test on the board. Total time lost: 15 minutes.	Day 3 – Teacher spends 2 hours and 15 minutes engaged in private reading, walking in and out of the classroom and talking to colleagues. Teacher utilises 2 hours instead of the 1 hour allocated to a subject, and 10 minutes writing a test on the board. Time lost: 2 hours and 15 minutes.
Day 4 – Teacher is 10 minutes late to class and spends 30 minutes of teaching time outside the classroom. Total time lost: 40 minutes.	Day 4 - teacher utilises 2 periods for one subject, leading to excess time usage of 1 hour 25 minutes. Teacher chats with a colleague for 45 minutes and spends 17 minutes writing notes on the board. Time lost: 45 minutes.	Day 4 – Teacher spends 30 minutes copying notes on the board, 10 minutes on prayer, and 30 minutes marking a class exercise. Time lost: 10 minutes, but also excessive time usage.
Day 5 – Teacher utilises time teaching and engaging with children.	Day 5 – Teacher utilises 1 excess hour on a subject; 45 minutes marking a class exercise; and	Day 5 – Teacher spends 12 minutes doing nothing; 18 minutes writing questions on the

	ends lesson 15 minutes early; After break, teacher leaves class for 47 minutes. Time lost: 1 hour 20 minutes.	board; and 54 minutes marking exercises. Nothing is taught during the last 1-hour period. Time lost: 1 hour 12 minutes.

Teacher contact time in public basic school in rural area

Primary/Grade 1	Primary/Grade 4	Primary/Grade 6
Day 1 – Teacher spends 13 minutes explaining subtraction; 2 minutes writing an exercise on the board; and then sits on the veranda. Children left alone in classroom to do an exercise, taking 2 hours 47 minutes instead of the allocated 1 hour. In the afternoon, teacher asks children to draw animals while teacher walks around chatting with colleagues. Time lost: 2 hours.	Day 1 – Teacher utilises 37 minutes reading an English passage with pupils, who then spend 1 hour 27 minutes doing an English exercise while teacher reads a post-diploma course book. Children asked to go for P.E. – a 1-hour period – but end up spending the rest of the day playing outside. Total teaching time lost: 2 hours 56 minutes.	Day 1 – Teacher spends 1 hour 57 minutes on English reading, each pupil being made to read a portion of the text aloud. Teacher spends 45 minutes on a science lesson; gives pupils a class exercise; and then leaves to take something home, which uses up 27 minutes of teaching time. Teacher marks class exercise while children play in the classroom. Time lost: 1 hour 51 minutes.
Day 2 – Teacher arrives 12 minutes late; spends 34 minutes marking a Mathematics exercise from the previous day; and returns exercise books to children. Teacher leaves class, returns 25 minutes later to find children making a noise, and spends 13 minutes lecturing them about good behaviour. Children given English books to read while teacher sits under a tree chatting with a colleague. Time lost: approximately 3 hours 20 minutes.	Day 2 – Teacher allows pupils to spend 90 minutes on P.E. instead of 1 hour. Pupils made to read a Fante (Ghanaian Language) passage, while teacher leaves the classroom; returns after 1 hour 56 minutes instead of the 1 hour allocated to Fante. Teacher spends 25 minutes teaching multiplication, and 4 minutes writing an exercise on the board. The rest of the day, children do the exercise while teacher reads a book. Time lost: 1 hour 13 minutes.	Day 2 – Children do P.E. for the first 2 periods, by the end of which teacher has still not arrived. Teacher enters the classroom after P.E. and teaches Mathematics, assigning an exercise, which utilises 2 hours 30 minutes instead of the allocated 1 hour 30 minutes. Teacher leaves classroom, returns after 1 hour 10 minutes, and gives children English books to read, which they continue to do until home time. Time lost: 2 hours 10 minutes.

Day 3 – Religious worship overruns into teaching time by 25 minutes. Pupils take 5 minutes to walk from assembly to their classrooms, by which time it is break time. Pupils do 3 Mathematics exercises written on the board while teacher spends 1 hour sitting on the veranda chatting with colleagues. The rest of the day, teacher sits outside chatting, losing 1 hour 45 minutes of teaching time. Total time lost: 3 hours 15 minutes.	Day 3 – Religious worship accounts for 30 minutes. After break, there is no teacher in the classroom for 50 minutes. Teacher spends 6 minutes writing an exercise on the board and then leaves for 54 minutes. The rest of the day (1 hour 30 minutes), pupils are left alone making a noise and teacher is nowhere to be seen in school. Total time lost: 3 hours 14 minutes.	Day 3 – Religious worship accounts for 30 minutes. Teacher leaves the classroom for 1 hour 7 minutes. In the last period, teacher spends 13 minutes teaching sources of energy and 5 minutes writing notes on the board. Teacher leaves the classroom for 45 minutes, and spends the last 40 minutes caning pupils for leaving the classroom in her absence. Total time lost: 3 hours 2 minutes.
Day 4 – First 2 periods, teacher is in school but not teaching, losing 1 hour 30 minutes. After break, teacher sits on veranda for 20 minutes; spends 6 minutes writing an exercise on the board; and then goes back to her seat on the veranda, losing 1 hour 54 minutes. During the last period, teacher marks the exercise and chats with friends, losing 1 hour 45 minutes. Total Time lost: 3 hours 39 minutes	Day 4 – First 2 periods, teacher in school but does not enter the classroom for 1 hour 7 minutes. Teacher distributes reading books and reads with children. Third and fourth periods, teacher not seen in the classroom for the rest of the day, losing 2 hours. Last period, pupils making a noise and 2 pupils fighting, losing 1 hour 45 minutes. Total time lost: 3 hours 45 minutes	Day 4 – First 2 periods, teacher reads with the class and gives exercises to pupils. Teacher sits in class for 30 minutes engaged in private reading. Third and fourth periods, teacher spends 26 minutes sitting under a tree chatting; returns to class and reads with pupils until break time. Last period, 50 minutes spent on an exercise; 1 hour 10 minutes utilised in marking. Total time lost: 2 hours 6 minutes
Day 5 - Teacher 5 minutes late for class; writes exercise on the board for pupils; and sits outside preparing lesson plans, losing 36 minutes. Third and fourth periods, teacher continues with lesson plans and chats on the veranda, losing 2 hours. Last 3 periods, teacher collects exercise books and goes back to her seat on the veranda until home time,	Day 5 – First 2 periods, teacher in school but not in class, losing 1 hour 30 minutes of teaching time. Third and fourth periods, teacher in class talking with pupils but not teaching. Teacher leaves the classroom after just 47 minutes with pupils, losing hour 39 minutes. Last 3 periods, teacher not seen in class at all, losing 1 hour 47 minutes. Total	Day 5 – First 2 periods spent on one subject instead of 2, losing 30 minutes. Third and fourth periods, pupils return to class 5 minutes late but class teacher still out chatting, eventually losing 40 minutes. Teacher spends 10 minutes explaining fractions and gives exercise; spends 47 minutes of teaching time marking exercise; and

losing 1 hour 45 minutes. Total time lost: 4 hours 21 minutes	time lost: 3 hours 56 minutes	leaves classroom 13 minutes before the break, losing 1 hour 27 minutes. Teacher not in classroom in last period, losing 1 hour 41 minutes. Total time lost: 2 hours 34 minutes