(Re)Assessing the Impact of School Capitation Grants on Educational Access in Ghana

Kwame Akyeampong

CREATE PATHWAYS TO ACCESS
Research Monograph No. 71

July 2011

University of Sussex
Centre for International Education
The Consortium for Educational Access, Transitions and Equity (CREATE) is a Research Programme Consortium supported by the UK Department for International Development (DFID). Its purpose is to undertake research designed to improve access to basic education in developing countries. It seeks to achieve this through generating new knowledge and encouraging its application through effective communication and dissemination to national and international development agencies, national governments, education and development professionals, non-government organisations and other interested stakeholders.

Access to basic education lies at the heart of development. Lack of educational access, and securely acquired knowledge and skill, is both a part of the definition of poverty, and a means for its diminution. Sustained access to meaningful learning that has value is critical to long term improvements in productivity, the reduction of inter-generational cycles of poverty, demographic transition, preventive health care, the empowerment of women, and reductions in inequality.

The CREATE partners

CREATE is developing its research collaboratively with partners in Sub-Saharan Africa and South Asia. The lead partner of CREATE is the Centre for International Education at the University of Sussex. The partners are:

- The Centre for International Education, University of Sussex: Professor Keith M Lewin (Director)
- The Institute of Education and Development, BRAC University, Dhaka, Bangladesh: Dr Manzoor Ahmed
- The National University of Educational Planning and Administration, Delhi, India: Professor R Govinda
- The Education Policy Unit, University of the Witwatersrand, South Africa: Dr Shireen Motala
- The Universities of Education at Winneba and Cape Coast, Ghana: Professor Jerome Djangmah, Professor Joseph Ghartey Ampiah
- The Institute of Education, University of London: Professor Angela W Little

Disclaimer

The research on which this paper is based was commissioned by the Consortium for Research on Educational Access, Transitions and Equity (CREATE http://www.create-rpc.org). CREATE is funded by the UK Department for International Development (DFID) for the benefit of developing countries and is coordinated from the Centre for International Education, University of Sussex. The views expressed are those of the author(s) and not necessarily those of DFID, the University of Sussex, or the CREATE Team. Authors are responsible for ensuring that any content cited is appropriately referenced and acknowledged, and that copyright laws are respected. CREATE papers are peer reviewed and approved according to academic conventions. Permission will be granted to reproduce research monographs on request to the Director of CREATE providing there is no commercial benefit. Responsibility for the content of the final publication remains with authors and the relevant Partner Institutions.

Copyright © CREATE 2011
ISBN: 0-901881-84-8

Address for correspondence:
CREATE,
Centre for International Education, Department of Education
School of Education & Social Work
Essex House, University of Sussex, Falmer BN1 9QQ
United Kingdom

Author email: a.akyempong@sussex.ac.uk
Website: http://www.create-rpc.org
Email create@sussex.ac.uk
(Re)Assessing the Impact of School Capitation Grants on Educational Access in Ghana

Kwame Akyeampong

CREATE PATHWAY TO ACCESS
Research Monograph No. 71

July 2011
Contents

Preface ............................................................................................................................. vi
Summary ......................................................................................................................... vii
1. Introduction ................................................................................................................. 1
2. Improving Access through Demand-side Financing – A Short Review ..................... 3
3. Demand-side Financing: the Debates and Evidence .................................................. 4
4. Studies on Demand-side Financing ............................................................................ 6
5. Fee-free Basic Education in Ghana: Developments and Progress ............................ 8
6. A critique of studies on the impact of capitation in Ghana ........................................ 11
7. Capitation and the Structure of Basic School Enrolments and Progression ............. 13
8. The Importance of the Effect of the Age-grade Profile of Students .......................... 17
9. The effect of CGS on Participation in Two Districts of Ghana .................................. 23
10. Tracking Attendance ................................................................................................. 26
11. Conclusion and Recommendations .......................................................................... 30
References ..................................................................................................................... 33

List of Tables

Table 1: Primary Education, Completion, Repetition and Dropout .................................... 20
Table 2: JHS Completion, Repetition and Dropout .......................................................... 20
Table 3: Percentage of Trained Teachers - National ....................................................... 22
Table 4: PTR and PTTR – Primary Teachers ................................................................. 22
Table 5: Dropouts by cohort in Mfantseman District ...................................................... 26
Table 6: Dropouts by cohort in Savelugu-Nanton District ............................................... 26

List of Figures

Figure 1: Evolution of Primary Enrolment 1980-2008 ...................................................... 13
Figure 2: Lower Secondary Enrolment Trend (1980 – 2008) ........................................... 15
Figure 3: New Entrants in Grade 1 who are at least 2 Years Over-age, by Background
Characteristics .................................................................................................................. 16
Figure 4: Mean Age-Grade 'Delay' ................................................................................ 17
Figure 5: Attendance by Age and Poverty ....................................................................... 18
Figure 6: Attendance by Age and Location ..................................................................... 18
Figure 7: Age-Grade - Primary Level ............................................................................. 19
Figure 8: Age-Grade – Junior High School ...................................................................... 19
Figure 9: Zones of Exclusion in Mfantseman District, 2003 ........................................... 24
Figure 10: Zones of Exclusion in Savelugu-Nanton District, 2003 ................................. 24
Figure 11: CREATE tracking data – Enrolment by Grade and Gender ............................ 27
**List of Acronyms**

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BECE</td>
<td>Basic Education Certificate of Examination</td>
</tr>
<tr>
<td>CGS</td>
<td>Capitation Grant Scheme</td>
</tr>
<tr>
<td>DDE</td>
<td>Directorate of Education</td>
</tr>
<tr>
<td>DEOC</td>
<td>District Education Oversight Committee</td>
</tr>
<tr>
<td>EFA</td>
<td>Education for All</td>
</tr>
<tr>
<td>EMIS</td>
<td>Education Management Information System</td>
</tr>
<tr>
<td>FCUBE</td>
<td>Free Compulsory Universal Basic Education</td>
</tr>
<tr>
<td>GDH</td>
<td>Ghana Demographic Health Survey</td>
</tr>
<tr>
<td>GES</td>
<td>Ghana Education Service</td>
</tr>
<tr>
<td>GLSS</td>
<td>Ghana Living Standards Survey</td>
</tr>
<tr>
<td>GSS</td>
<td>Ghana Statistical Service</td>
</tr>
<tr>
<td>ICESCR</td>
<td>International Covenant on Economic, Social and Cultural Rights</td>
</tr>
<tr>
<td>MOE</td>
<td>Ministry of Education</td>
</tr>
<tr>
<td>PTR</td>
<td>Pupil Teacher Ratio</td>
</tr>
<tr>
<td>PTTR</td>
<td>Pupil Per Teacher Ratio</td>
</tr>
<tr>
<td>SMC</td>
<td>School Management Committee</td>
</tr>
<tr>
<td>SPIP</td>
<td>School Performance Improvement Plan</td>
</tr>
<tr>
<td>UDHR</td>
<td>Universal Declaration of Human Rights</td>
</tr>
<tr>
<td>UNESCO</td>
<td>United Nations Education Scientific Cultural Organisation</td>
</tr>
</tbody>
</table>
Acknowledgements

I would like to thank the Ghana CREATE team for the hard work they put in to track the attendance of nearly 3000 school children in northern and southern Ghana. I have drawn on this data and others produced by the CREATE team to write this paper. Without the data that was generated from this work and other CREATE analysis on access in Ghana, much of the insights in the paper would not have been possible. A special thanks to Dr Eric Ananga who helped with the literature review in the paper. Finally, I would like to thank all those who gave valuable feedback on presentations I gave on the subject of Capitation Grant over the last two years.
Preface

This is an important piece of research exploring the efficacy of capitation systems of funding to enhance access and improve completion rates for children of primary and junior secondary ages. Ghana's experience is important as it has had one of the more effective education systems in Africa and has a record of educational reform that is well known regionally. Capitation - the funding of non-salary expenditure in schools on the basis of enrolments - was introduced in 2005 to obviate the need for schools to charge tuition and other fees. The simple idea was that by reducing the cost at the point of service delivery those inhibited by poverty from attending school would be enabled to realise their right to basic education. In the first year enrolments increased, especially in grade 1, and between 15 and 20% more children appear to have enrolled in the lowest grades. There are many important issues raised by the Ghana experience and touched on in the discussions around this research monograph. These include whether:

- the level at which capitation is granted is sufficient to discourage the charging of fees
- the initial effect on enrolment and retention is sustained - tuition fees can only be abolished once
- flat rate subsidies - e.g. making all schools tuition fee, rather than making them tuition free only for those below a poverty threshold - are efficient and effective
- delivery mechanisms are such that transaction costs are minimised and opportunities to extract rentals in the disbursement system are minimised
- accountability and transparency are sufficient to ensure capitation monies are spent on things which enhance participation, progression and learning outcomes
- collateral actions e.g. reducing over age enrolment, acting to improve attendance and reduce absenteeism of children and teachers, improving pedagogy, are sufficient to reinforce the impact of capitation fund allocation systems
- there is sufficient monitoring and evaluation to tune the system to maximise its effectiveness and maintain its impact

This research uses the unique CREATE data set to explore aspects of the changes that have occurred after capitation was introduced. It shows that capitation systems can be helpful but have limitations and are no magic bullet that can compensate for underlying sources of inefficiency and ineffectiveness. Rather they are likely to be a valuable part of an armoury of policy options that need to be tailored to circumstance, monitored for impact, and iterated to increase their impact. Part of this process will recognise the need for targeting that works if scarce resources are to be more effectively used. Policy makers should absorb the lessons of the Ghana experience before embarking on new capitation systems.

Keith Lewin
Director of CREATE
Centre for International Education
University of Sussex
Summary

Improving educational access in Ghana has moved through several paths and trajectories landing with the introduction of capitation grants to eradicate fees in basic schools. Available education statistics data suggests that in its first year the introduction of capitation grants produced a seismic shift in demand as hoped for by the policy. The principle behind introducing capitation was that it would eliminate household need to pay fees for basic education, especially for the poor who it had been shown were not accessing education because of the costs, and enable schools to use the funds to improve the quality of education. This paper examines the effect capitation has had on achieving these goals, in particular, the extent to which it has impacted on access for the poor and continues to make education more accessible. Using EMIS and CREATE school enrolment data from two districts in the south and north of Ghana, it investigates the underlying factors that shape access and participation, and what the implications are for achieving greater impact from capitation. The paper concludes with concrete proposals on maximising the impact of capitation on educational access in Ghana.

The introduction of Capitation Grant as a demand-side intervention to improve access works up to a point – its success lies in pulling a large group of out of school children back into education. As the evidence discussed in the paper shows, the greater challenge is to eliminate dropout and that the age of entry and regular attendance is at the heart of the challenge facing the achievement of sustainable access. The paper argues that a system unprepared to deal with the surge in enrolments through increased infrastructure and incentives to reward schools that achieve internal efficiency and effectiveness, may find that Capitation Grant actually creates more problems for future attempts to achieve sustained enrolment. Further, the paper argues that if the problem of dropout and overage enrolment is not tackled through a set of policies that reduce their effect, then it is unlikely the structure and pattern of access in Ghana will change for a long time. Certainly, Capitation will not be the answer to this problem. As systems achieve high enrolment as a result of demand-side interventions such as Capitation, this has to be translated into sustained attendance if the benefits of attendance is not to be reduced to the point where the initial gains are not eroded.

The story of the rather limited impact of Capitation Grant is a wakeup call for identifying policies and strategies that do not only increase gross enrolment, but also make schools more efficient in terms of understanding how to deal with the wide range of learning needs that pupils who have been out of school bring when they re-enrol or enrol for the first time. The other important message is that, there needs to be a faster delivery of Capitation Grant to schools while ensuring accountability in the use of the funds. The paper concludes with concrete proposals on maximising the impact of capitation on educational access in Ghana.
(Re)Assessing the Impact of School Capitation Grants on Educational Access in Ghana

1. Introduction

While basic education is considered a fundamental human right, and therefore, incumbent on governments to provide education for all children irrespective of their social, cultural or economic background, the issue of the costs continues to challenge both governments and households on how to achieve this goal. Lack of education contributes to social inequalities and vulnerability to poverty (Moncrieff 2009), and therefore, combating social exclusion has to start with ensuring equal access to quality education for all. In fact, “the lack of educational opportunities for children often reinforces their subjection to various other human rights violation” (EFA Working Document 1996 p. 45).

The issue of rights to basic education goes as far back as the 1948 Universal Declaration of Human Rights (UDHR) article 26 which declared that, “everyone has the right to education. Education shall be free, at least in the elementary and fundamental stages”. Similarly, the International Covenant on Economic, Social and Cultural Rights (ICESCR), articles 13 and 14 reinforced these rights, stating that, “primary education shall be compulsory and available free to all” (emphasis added). But, though basic education as a human right is embedded in several legal and constitutional frameworks of many developing countries, this has not necessarily led to the abolition of school fees to ensure the enjoyment of this right by all. According to UNESCO, “… roughly one in five [countries], do not constitutionally guarantee free and compulsory primary education, and the proportion rises to one in three if North America and Western Europe” are included (UNESCO 2007, p 25). Nevertheless, the international consensus is that free basic education should be a fundamental and basic human right.

Over the years Ghana has introduced policies that have sought to make basic education more accessible with varying degrees of success (Akyeampong et al., 2007). The most recent initiative is the Capitation Grant Scheme (CGS) introduced in 2005. Schools receive a fixed amount of funds based on the number of pupils enrolled at approximately $6 per pupil. Indications from enrolment figures after CG had been introduced suggested that, indeed fees were a major barrier to access, as this led to a surge in enrolments. However, this paper argues that this really amounted to a one-shot effect, and that it has not been effective in sustaining high demand, attendance and completion of basic education. Going by the experience of other countries suggest that abolishing fees initially produces an enrolment surge, but with time participation patterns return to norms prior to the surge. Kenya is a good example of this trend (see, Somerset 2009).

Using EMIS data and Ghana CREATE data from two districts, this paper suggests that, a lot more attention needs to focus on policies and practices that can sustain high participation and retention throughout the school cycle. Capitation can be a giant step forward, in the bid to
achieve EFA, but other important steps are necessary to achieve effective demand. In particular, retaining the large number of children who enrol will require improvements in the internal efficiency of schools, including securing inputs that will improve quality. Increase demand could impact negatively on subsequent attendance if all that is achieved is simply, removal of the cost barrier to households which created non-attendance in the first place. Furthermore, if schooling produces limited success in terms of improved learning and achievement, then chances that households and children will under-value education increases, and coupled with opportunity cost, is likely to increase non-attendance and eventual dropout.
2. Improving Access through Demand-side Financing – A Short Review

Despite the fact that many governments have increased investment in education to expand access at the basic education level, many poor and socially marginalized groups still face difficulties accessing education. Although the gender gap in educational participation has narrowed disadvantaged groups including those in rural areas, the poor, minorities and indigenous groups still lag behind (UNESCO 2007). The attempt to address the problem of lack of access to education has focused mainly on eliminating the direct costs associated with participation in schooling (see UNESCO 2007; Cohn & Geske, 1990). The consensus is that the state should bear that responsibility. It is argued that in systems with limited financial resources, low enrolment rates, and a high proportion of households on low incomes, increasing public financing of education is the way to improve equitable access (Castro-Leal 1996, van der Walle 1995; Ablo & Reinikka 1998). But where state funding of education is inadequate, some public schools have responded by charging fees for their operational costs which has diminished enrolment and progression. For example, in the Democratic Republic of Education (DRC) where only about 8% of public spending went to education in 2008, only about a quarter of children in primary 1 reach the fifth grade, and only about a third complete primary schooling (DRC AfriMAP report 2010). Decentralisation of education services does not appear to have improved the situation – again in the DRC what has happened is the ‘de-facto privatisation of the education system with the introduction of school fees’, and increased non-attendance in urban and rural areas (DRC AfriMAP report 2010). Also in Senegal, as a result of decentralisation, local authorities shifted some education costs to parents resulting in low attendance and dropout (Senegal AfriMAP report 2010).

According to Patrinos & Ariasingam (1997), public funds should be channeled directly to individuals, or to institutions based on expression of demand by users, and that this will effectively lower or eliminate the education cost burden on households. For poor households in particular, such actions will motivate demand and change attitudes towards education by lowering the opportunity cost (Patrinos et al., 2002; Ravallion & Wodon, 1999). Besides, once schools receive direct funding this can be channeled to improve classroom level investments and the quality of education. As a result the value households place on education will improve and create increase demand for education. As Moncrieffe (2009) argues, “children are less likely to go to school when they grow up in communities in which very few children go to school” (p 5). In effect, increase access creates momentum for demand.

Focusing on the supply of educational inputs/infrastructure is not an optimal solution to the problem of improving access especially if overall access to education is significantly below what policymakers or society deem optimal. Segments of society that are poor may not be able to afford the direct and indirect costs associated with schooling, and therefore, will not participate even when a school is located in their community. For this and other reasons, demand-side financing has become attractive to policy makers as a way of optimizing supply.
3. Demand-side Financing: the Debates and Evidence

Demand for schooling is influenced by economic, political, social, and cultural factors (UNESCO 2007). For the poor, survival needs may push education down the priority ladder, especially if the benefits are perceived to be less than the investment in terms of time, resources and outcomes. Thus, the existence of a school is not a sufficient condition for access. Schools must meet client expectations if there is to be sustained demand and consistent attendance. Where there is limited access due to the costs to households, demand-side financing schemes try to motivate demand for education by making public funds directly available to suppliers to improve provision at no cost to the consumer. Because funds follow, or is given to, consumers or directly to providers, it is expected that this will eliminate the need to charge clients for services, improve response to community needs, management, local decision-making, and the efficiency in which funds are used (West et al., 2000; Doyle 1984; Vawda 1997).

Demand-side financing schemes in education come in various forms. One form is stipends/scholarships, where cash payments are made directly to a family to either offset a child's schooling expenses, or to compensate a family for the loss of the child's labour. Another is voucher schemes, where payments are made directly to a student to access a school. Another variation is community financing, where resources are used to encourage community participation in education. In some cases, targeted bursaries of cash payments are made directly to schools, municipalities, or provinces. Student loans have also been used in some context to help defray costs to the government and help more students to access higher education (Vawda 1997; Patrinos and Ariarsingham 1997; World Bank, 1999; Patrinos 2000; Levin 2000; World Bank, 2002). These schemes allow the state, or community and/or the private sector to contribute financially thereby reduce the cost burden to households and improve demand.

Demand-side financing in education is not restricted to low-income country contexts. In developed countries (e.g. Australia), it has often taken the form of revenue-sharing formulas to offset fiscal disparities in state governments' budgets, provided block grants relative to poverty and number of students, and assistance to private schools based on need. In countries such as, Canada, Japan, Netherlands and Sweden, capitation grants and assistance to private schools has been more popular. A scheme of higher unit level of funding for poorer students is practiced in New Zealand where the funding formula relates to the number of students and

---

1 The stipend is used to cover core expenses such as books, tuition, and transport, and incidental expenses such as materials, game fees, and clothes are covered
2 Payment (cash or coupon) given directly to students. Students may submit vouchers to the school of their choice. The voucher mechanism can be a way in which a student from a non-privileged background escapes a poor quality neighborhood school or moves to a school that is more appropriate culturally
3 Community financing can occur through monetary contributions or through non-monetary support in the form of land, labor, materials, and social marketing of the benefits of education.
4 Bursaries are cash payments that may go directly to schools, municipalities, or provinces and are earmarked for specific purposes, such as improving the curriculum or increasing school access for minority, indigenous, or poor children
5 Student loans can be in the form of commercial private loans or government-guaranteed student loan
household socioeconomic status. In the United Kingdom, assistance to private schools (places for low-income students) is practiced. The United States of America has experimented with the voucher scheme.

In less developed countries, demand-side financing schemes have been used to financially support church schools on the basis of need (Belize, Lesotho). In other cases, matching-grant schemes and capitation grants have used criteria such as number of students, socioeconomic status of students, or location to increase demand (e.g. Brazil, Botswana China, Ghana, India, Mauritius, and Tanzania). Voucher schemes, which have either targeted poor students, or capitation grant for all students has been popular in countries such as Chile and The Gambia (Levin 1991). In some contexts, stipends have been used to target girls to improve their participation in education (Guatemala). Other examples are community-sponsored schools (Myanmar), scholarships for rural girls (Morocco and Mozambique), and bicycles for poor students in rural areas (Thailand - based on transportation needs) (see, Bray 1996; Fiske 1996; Patrinos and Ariarsingham 1997; Patrinos 2000; West 1996; World Bank1995)
4. Studies on Demand-side Financing

Studies on demand-side financing suggest that to achieve their desired outcomes they have to be tailored or adopted to reflect contextual needs. So for example, while stipends/scholarships worked well in some countries to achieve equitable access (e.g. Bangladesh, Brazil, Indonesia, Guatemala, Morocco, Mozambique, Pakistan, and Senegal), community financing was the favoured approach to increase access, improve quality, and make schools more responsive to community needs in some other countries (e.g. Chad, El Salvador, Myanmar and Pakistan). In China, Colombia, Mexico and Tanzania, targeted bursaries were used to increase access, improve quality and equity and improve local decision-making (see Patrinos & Ariarsingh 1997; Patrinos 2000).

The use of vouchers is reported to have resulted in increased choice, equity, improved education quality and efficiency in resource use (Chile, Colombia, Ivory Coast, The Gambia, Holland, Kenya, New Zealand, Spain, United Kingdom and the United States) (see Hoxby, 2003; King, et. al., 1997; Laroque & Vawda 1999; Gauri & Vawda, 2003). In Australia, Canada, Czech Republic, France, Japan, Lesotho, Pakistan, Senegal, and the United Kingdom, some level of public assistance to private schools resulted in increased choice, equity and improved quality through competition (see Patrinos & Ariarsingh 1997; Patrinos 2000). The introduction of a capitation grant scheme showed similar results in Brazil, Canada, Chile, The Gambia, Ireland, Netherlands and Sweden (see James, E. 1984; Patrinos & Ariarsingh 1997; Patrinos 2000; Ritzen, et al., 1997; Vawda 1997; Laroque & Vawda 1999).

Other evidence suggests that the impact of demand-side financing is mixed. On the impact on achievement, some studies suggest it has made little or no impact (see Witte et al., 1995), while others report positive gains (Green et al., 1998; Rouse, 1998). Voucher schemes are reported to be particularly effective in improving educational opportunities among poor and marginalized groups. In the United States they have been used to help poor families' access to private schools, but their impact has been particularly significant for African Americans (Howell and Peterson, 2002; West et al., 1997). There is also evidence of demand-side financing schemes being used to improve access to public schools, especially in developing countries. These have been recorded in countries such as Colombia where voucher schemes were used to improve enrolment and completion rates in public schools (Angrist et al., 2002; King et al., 1997), in Pakistan and Bangladesh to improve enrolment of poor girls, and in Brazil to improve access for low-income families (see Vawda, 1997; World Bank, 1999; World Bank, 2002).

In the case of sub-Saharan Africa, there has been much interest in using fee-free policies to create demand for education. In countries such as Malawi, Kenya, Tanzania and Zambia, this has resulted in dramatic increases in enrolments at both primary and secondary education level (Al-Samarrai et al., 2007; USAID, 2007). Much of the evidence suggesting impressive impact has been about the surge in total enrolment in the year following abolition of school
fees: 11% in Lesotho (2001), 12% in Mozambique (2005), 14% in Ghana (2006), 18% in Kenya (2004), 23% in Ethiopia (1996), 23% in Tanzania (2002), 26% in Cameroon (2000), 51% in Malawi (1995) and 68% in Uganda (1998) (see UNICEF 2007; USAID 2007). The one criticism that can be leveled against such studies is that, they do not provide evidence of long-term impact – i.e. what happens in 5, 10 or 15 after the sharp rise in enrolments? To what extent is the system able to sustain high participation and completion rates following high enrolments? This paper will provide some answers to this important question in the case of Ghana.

The use of Capitation Grants (CG) in sub-Saharan Africa has been effective in increasing enrolments, but often this has not translated into high attendance and completion of schooling (see, Chimombo, 2009 - Malawi; Akyeampong 2009 - Ghana, Somerset 2009 - Kenya). Besides, there is the question of whether CGs can motivate demand well above the social and environmental conditions that limited it in the first place, and to what extent it offsets the opportunity costs. Demand can also be undermined by the negative effects of social and cultural practices which undervalue formal education, (e.g. fosterage – Rolleston 2011; seasonal agricultural practices – 2011). Indirect costs such as the cost of school uniforms, food, transportation etc. may lower demand even when CGs have in effect eliminated direct costs to households (see, Akyeampong 2009; Akyeampong et al., 2007).

There is also the important issue of over-age never enrolled or school dropouts and their motivation to enroll. We know that as children grow older, the opportunity costs of their time tend to increase due to labour demands in the community, which creates a disincentive to enroll or attend regularly (Fentiman, Hall & Bundy 1999; Blunch & Verner 2000). Overall, the research on educational access suggests that a range of interlocking supply and demand-side factors is necessary to increase and sustain access to education. Supply-side financing alone, such as construction of schools, payment of teacher salaries can disproportionately serve relatively wealthier segments of society. Demand-side financing on the other hand can be effective in serving the educational needs of marginalized groups, particularly the poor. Although several studies suggest that demand-side financing can be used to improve access, we know little about their effect in the long term. In effect, can it be used to fundamentally change the structure of access and participation in an education system - from low to high participation and completion rates?

The next section gives a short account of the range of policies that have been tried in Ghana, before and after independence, to make basic education more accessible.
5. Fee-free Basic Education in Ghana: Developments and Progress

Before Ghana gained independence in 1957, a number of policies had been introduced to improve access to public primary education. Under the colonial government of Sir Gordon Guggisberg from 1919 to 1927, financial assistance was given to church missionary organisations to expand access, although education was not compulsory and free. Five of Guggisberg’s ‘sixteen principles’ for education development outlined the vision and strategy for education expansion.

1. Principle 1: Primary education must be thorough and be from the bottom to the top
2. Principle 4: Equal opportunities to those given to boys should be provided for the education of girls
3. Principle 13: Education cannot be compulsory and free
4. Principle 14: There should be cooperation between the government and the missions; and the latter should be subsidised for educational purposes
5. Principle 15: The government must have the ultimate control of education throughout the Gold Coast (colonial name of Ghana)

(Source: McWilliam & Kwamena-Poh 1975:57; emphasis added)

Basically, education provision was to be a shared responsibility between government and citizens (principle 13), but also with government subsidising the private sector (principle 14), paying teacher salaries and supplying curriculum materials for both state and church run schools. After the Guggisberg plan was a 10-year education expansion programme which aimed to achieve universal primary education in 25 years (from 1945 to 1970) – a plan that was not achieved partly because education was still not free. The next major initiative was the 1951 Accelerated Development Plan (ADP) which revoked Guggisberg’s 13th principle and introduced tuition-free and compulsory primary education for all. After independence the new government introduced the 1961 Education Act section 21 of which prohibited the payment of tuition fees at public primary, middle or special schools. Parents were required to pay essential books and stationery materials for practical work.

Two major reforms in 1987 and 1995 (Free Compulsory Universal Basic Education ‘FCUBE’), redefined basic education as comprising primary and junior secondary, and as tuition free, compulsory and universal for all school-age children. FCUBE also emphasised the importance of improving quality to improve demand, and although both FCUBE and the 1987 education reforms improved participation in education, improving quality remained harder to achieve (World Bank 2004).

The notion of ‘free’ education generated public debate as to what this meant. Some interpreted that to mean that all costs associated with basic education would be free. However, the GES explained that the government would provide free tuition, textbooks, teaching and learning materials, and subsidise the cost of exercise books, and the Basic Education Certificate Education (BECE) fees for both public and private candidates (Ministry
of Education/GES, 2001). Parents, however, were expected to pay other fees. The GES allowed PTA’s to levy parents for school development activities, on condition that schools sought clearance from either the SMC’s, District Education Oversight Committee (DEOC) or District Assemblies to avoid excessive charges being imposed. But this effectively opened the backdoor for schools to introduce ancillary fees. In some districts, headteachers came under intense pressure to collect levies with the consequence that children were sent home when their parents failed to pay imposed levies, as this particular case illustrates:

“Some head-teachers in the Akwapim North District of the Eastern Region for instance described a system whereby an ‘embargo’ is placed on a head-teacher’s salary if he/she fails to collect and pay the approved levies at designated dates. The embargo operated through an instruction to the particular head-teacher’s Bank instructing them to withhold payment of his/her salary until further notice … the negative consequence, however, is that since all the pupils, especially in the rural communities are not able to settle their bills immediately school re-opens, the head-teacher is often compelled to source funds and pay up on behalf of the pupils so as to avoid his/her salary being put under embargo … to retrieve his/her money, the head-teacher [had] no option but to send the pupils out of school to compel their parents to pay up. This, the head-teachers admit, often results in some pupils staying away from school the rest of the school term, and in some few cases, some pupils never return to school; they forever become drop-outs” (MOE/GES 2001, p 42).

By allowing schools to levy parents for items such as registration fees, uniforms, textbooks etc., FCUBE had effectively made basic education not entirely free from the point of view of many parents. In truth, the levies were a way of schools making up for the reduction in public funding of education (World Bank 2010). Although both reforms reversed the deterioration of the education system and increased enrolment rate by over 10% in fifteen years, quality deteriorated and some level of fees persisted and altogether weakened demand from the poorest households (World Bank 2004).

As a further step to improve demand the government introduced Capitation Grants (CG) to relieve parents of the burden of paying fees charged by schools. CG was piloted in 40 deprived districts in 2004 and scaled-up nationwide in 2005. Currently, each school receives on average $6 per enrolled child. Capitation was to give schools the necessary funds to improve teaching and learning, give support to needy students, and introduce school-based in-service training (GES, 2005). To access the funds, schools are required to provide enrolment figures and a school performance improvement plan (SPIP) with details of how the funds would be used to achieve stated goals. The SPIP is prepared by the school head and staff and is expected to be approved by the SMC to cover the whole academic year but broken down as termly plans. To access the funds, schools have to submit their SPIPs to the district education office for approval before it is released into the school’s bank account. Schools without bank accounts are expected to pick up their funds directly from the district office. At the end of each term, they are expected to submit a report of expenditure returns which accounts for the use of the grant.
On the Ministry of Education side, it makes projected estimate of enrolments in each school at the beginning of the academic year based on the district GER. This estimate is used to transfer 50% of capitation funds via the districts to the school at the beginning of the first term. Later transfers for the first term are dependent on the submission of returns on the actual enrolment for the school in the course of the term. For the second and third terms, funds are expected to be transferred based on the enrolment levels established in the first term. This implies that if a dropout enrols in the 2\textsuperscript{nd} or 3\textsuperscript{rd} term, the school does not receive capitation for that child until the following year. These steps may be intended to ensure accountability, but may cause delays in timely release of capitation funds, if schools do not provide credible plans on time, or need to resubmit them to address queries from the district. If the full CG amount is not received or the amount received is less than what has been budgeted for, this will undoubtedly set limits on what schools can achieve with respect to their SPIPs. According to guidelines for administering the grant, schools can use their grants for the following:

- Provision of Teaching and Learning Materials
- School Management (including T&T and stationery)
- Community and School Relationship
- Support to Needy Pupils
- School and Cluster based In-Service Training
- Minor Repairs
- Payment of Sports and Culture Levies (to be approved nationally)
6. A critique of studies on the impact of capitation in Ghana

According to Ghana’s EMIS data after CGs had been introduced basic school enrolments increased by an estimated 17% (MOESS 2007). Using the similar EMIS data, Maikish & Gershberg (2008) reported that CGs made a particularly positive effect on enrolments in deprived areas, but also added that the uneven application of the funds resulted in uneven enrolment trends among population groups and regions. According to a recent World Bank (2011) report on education in Ghana, the enrolment increases in the first year as a result of CGs was;

“almost fully counterbalanced by increasing dropouts and limits in learning outcomes” … and that, “the effect of capitation grant on net enrolment was an increase of slightly more than 2.2%, but the effect on deprived districts was not significant given the high level dropout and prevalence of overage enrolment” (World Bank 2011, p. 18).

This appears to be a much more accurate assessment of the impact of CGs as it factors in dropout and overage enrolment over the period. The issue of the effect of overage on enrolments and potential dropout is discussed in more detail later in the paper. It remains a missing element of many analysis of the impact of CGs on enrolments. Evaluation studies tend to focus much more on gross enrolments and use this as an indication of positive impact.

A study by Osei et al., (2009) examined the effects of capitation on education outcomes in Ghana. Using an econometric estimation model, they assessed the impact of CGs on enrolments, the Basic Education Certificate Examinations (BECE) pass rates, and the gender gap. The results showed that CGs had no significant impact on the BECE pass rates, and instead, what was more significant was the proportion of trained teachers. On the relationship between CGs and enrolment rates, the study found no significant effect, although “enrolments did increase over the study period (i.e. 2005-2007)” (p 21). Finally, the analysis revealed that capitation had no significant effect on bridging the gap between BECE pass rates for males and females. As noted earlier, the sudden increase in enrolments put pressure on existing school facilities and reduced the quality of provision. Without effective planning to accommodate the additional number of pupils, overcrowded classrooms and increased teacher workloads is likely to increase dropout.

Research by the Brookings Institute (2009), showed that capitation disbursements often fall short of what schools expect, which made it difficult for them to execute activities that would improve quality. The report suggested that some head teachers misappropriated the grants by giving ‘soft loans’ to teachers and excluded SMCs in the implementation of planned activities. As noted earlier, the mechanism for delivery of CGs to schools risks delays that could limit the intended impact on quality. Striking a balance between procedures to ensure accountability in the use of CGs and ensuring that schools access the funds without delay is a challenge.
A study by the Ghana Centre for Democratic Development (CDD) (2010) tracked capitation grants in 30 public primary schools in 2008/09 academic year. Specifically, the study tracked the disbursement, management and use of CGs. The report pointed out that CGs would ensure universal access if allocated resources reached schools and was used for their intended purpose. The evidence from the study pointed to poor management and utilisation of CGs and noted the following findings as limiting its impact on enrolment.

- Irregular release of the grants - there appears to be no fixed time period for the release of the CGs from the GES to the district directorate of education (DDE), and from the latter to beneficiary schools

- Poor recording keeping of enrolments – this impedes timely release of funds for school improvement activities. It is suggestive of weak school management.

- Charging levies/fees – this appears to happen when there are persistent delays in accessing the CGs – this puts pressure on schools to fill in the funding gap using unauthorised means. Only a small proportion of respondents concluded that the CG had significantly reduced the financial burden of parents – the fact that schools were charging parents fees and levies as a result of the delays in release of capitation is a further indication of the inefficiencies in the management and disbursement of the funds directly to schools.

- Weak or limited capacity to develop school improvement plans - only 17% of schools surveyed submitted their SPIPs in time for each of the three terms of the 2008/09 academic year. The ability of schools to develop good plans depended on their level of capacity.

- One-sided use of CGs - CGs is mainly expended on sports/cultural activities, hygiene/sanitation facilities, furniture, infrastructural works, and teaching and learning materials – the list of items that capitation is spent on suggests that schools lack the basic infrastructure that would make them places for effective schooling. Although, what schools spend most of the capitation on is in effect to improve the quality of provision, it also means that, not much is left to spend directly on demand-driven initiatives that will improve and sustain access. (CDD 2010, p. 5-6)

Overall, much of the empirical evidence on CGs suggests that, although it has contributed to increasing school enrolments, its administration has been fraught with difficulties that have limited the full impact. There are also questions about the effect of internal efficiency on sustained demand. To understand this better, it is necessary to examine patterns of grade-specific enrolments and age-specific participation before and after capitation was introduced. Doing so has the potential of understanding the effect of over-age on participation and dropout.
7. Capitation and the Structure of Basic School Enrolments and Progression

To put into perspective the effect of capitation on the evolution of enrolments in basic schools, it is important to examine the enrolment trend before and after capitation came into effect. Overall, the evidence from yearly EMIS enrolment data (from 1980s to 2008) suggests that enrolments have been on the increase (see figures 1 & 2). Population growth is likely to be a contributory factor given that the 5-17 age group shot up rapidly with the absolute size of this group growing by more than 50% between 1991/92 and 2005/06. The number of children attending school in 2005/06 is estimated to exceed the 1991/02 figure by more than three million (see, Rolleston 2009).

Three main observations can be made from the analysis of primary enrolment. First in absolute terms, enrolment by grade from 1980 to 2008 more than doubled. This growth, however, did not translate into high transition across the primary cycle suggesting that dropout continues to be a fundamental problem of educational participation. Figure 1 shows that the grade 1 to 6 enrolment ‘band width’ has barely changed over the period: the enrolment ratio is approximately 1.5 for both 1980 and 2008. So, although enrolments have improved, mainly as a result of population growth, progression through to completion of primary schooling has remained at low levels in nearly 30 years. CGs does not appear to have made any difference even though clearly more children enrolled as a result of this policy in 2005. Examining enrolment trends well before capitation was introduced and after, suggests that, demand-side enrolment drives such as CGs only produces a tsunami-like enrolment effect. What we see is that dropout by the end of primary 1 has remained largely unchanged, and in fact, appears to have worsened slightly (Figure 1 - gap between the primary one and primary two curves).

Figure 1: Evolution of Primary Enrolment 1980-2008
The drop in enrolment in 1987 is striking given that this occurred when major reforms to improve access to education began. Unlike the immediate impact that capitation had in 2005, the 1987 reforms achieved a steady rise in enrolments due to the reforms emphasis on improving the supply of educational inputs such as, improving school infrastructure, restructuring the school curriculum and extending basic education from 6-years primary to 9-years basic education. Also, the 1987 reforms abolished school fees but did not replace the lost income to schools with direct state funding, as was the case with CGs. Consequently, the issue of schools charging levies continued and undermined demand. When FCUBE was introduced in 1996, enrolments rose but not significantly. The situation changed when CGs were introduced in 2005/06 as shown in the steep rise in the enrolment gradient (Figures 1 & 2).
Thus, irrespective of enrolment drives it appears that schools find it difficult ensuring that children persist to complete basic education. This raises questions about internal efficiency and why schools seemed unable to retain children who enrol. All the major reforms to improve access appear to have had little success in significantly reducing or eliminating the incidence of dropout and improve learning outcomes. In 2005/06, when enrolments rose sharply, “dropout in primary education [also] rose to about 20% as capitation grants allowed schools to accept more students, many of them older and less prepared to study [thus] while enrolments have been consistently on the rise, a real challenge seems to be in reducing early dropout, but also overage enrolments and repeaters” (World Bank 2011, p 22).

Primary dropout by grade appears to be lower than at junior high school. While dropout at the end of JHS1 is low, the enrolment gap between JHS2 and JHS3 is wider, indicating a higher risk of dropout as pupils move from JHS2 to JHS3 (see Figure 2). The enrolment by grade profile (JHS1 to JHS3) in the 1980s was better than the 1990s and has since 2000 widened. Cohort tracking of pupils from primary 5 to JHS3 between 2001 and 2005 suggests that, the risk of dropping out in a particular grade is highest in primary 5 and JHS2 (see Akyeampong et al., 2007). Why does this problem persist in Ghana? It may have to do with the level of over-age enrolment. To ensure that fewer children abandon school getting a child enrolled at the appropriate age at the beginning of primary education is key, since being overage places incremental pressure on the student to begin working and generating income (World Bank 2011). This may explain why dropout by grade actually increases at higher grade levels i.e. JHS2 & JHS3. Ghana Demographic and Health Survey (2003) data suggests that, students entering primary 1 could be at least 2 years over-age (see Figure 3). Again what is striking from Figure 3 is that over-age entrant is high in both rural and urban locations, and is not affected by the educational level of the mother, although clearly the poorest are disproportionately affected than the rich.
Figure 3: New Entrants in Grade 1 who are at least 2 Years Over-age, by Background Characteristics

Source: (World Bank 2011 - based on the Ghana Demographic and Health Survey, 2003.)
8. The Importance of the Effect of the Age-grade Profile of Students

To investigate the age-grade profile of students at the time CG was introduced the 2005/06 GLSS V household survey data was analysed. The results are presented in Figures 4 to 8. Figure 4 shows that student’s from the poorest households on average delayed entry by more than 3 years. Households in the second, third and fourth welfare group delayed entry (mean age-grade delay) by between 2 and 3 years. Delayed entry is highest in regions with low gross enrolment rates (see Akyeampong 2009). Even for wealthier students, many do not start school at the official school age. Attendance is generally poor for all age groups – rises until age 13 then starts to decline (Figure 5). Those classified as ‘poor’ had a similar attendance by age profile, only slightly better than the extremely poor. As expected, the ‘non-poor’ have high attendance rates but which also begins to decline at age 13.

Figure 4: Mean Age-Grade 'Delay'\(^6\)

\(^6\) ‘Mean age-grade delay’ = mean difference between the average actual age in a particular grade and the age which would be consistent with timely enrolment and progress
Similarly, Figure 6 shows that rural children attendance is much lower than that of urban children, and improves with age until 13 years then declines rapidly. Urban children show consistently high attendance till age 13. Figures 7 & 8 shows the age grade profile in primary and lower secondary grades. Children in the first three grades (primary 1 to 3) have an almost identical age profile i.e. there are pupils in primary 3 with the same age as some in primary 1 and 2, and vice-versa. A similar trend occurs in the upper primary grades (i.e. primary 4 to 6). The age grade profile of junior high school level students is wide but between grade differences are small (Figure 8).

Thus, from the age profile of students it is very likely that dropouts entering school at the time of capitation will be mostly over-age. These students would be entering schools in which the general structure of classes is mono-grade but where the ages of students is wide, necessitating the need for pedagogic plurality. How children in these contexts settle and progress in school would have depended on how teachers recognise the effect on wide learning needs and respond appropriately in their teaching. Failure to do so is likely to have
produced the conditions that result in repetition and dropout (World Bank 2010). A surge in enrolments produced by the introduction of CGS in 2005 would have contributed to this wide age grade profile, with the poor more likely to be enrolling at a much older age than the official age for their grade (Figure 4). Because children from poor households are more likely to have lower attendance (Figure 5), and the older they are (13 years or over) attend more irregular, they are likely to fall in the group that risk becoming dropouts. This is likely to come about because CGs allowed “schools to accept more students, many of them older and less prepared to study” (World Bank, 2010, p. 23).

Repetition, late entry or overage attendance means that the number of students in basic schools would be larger than the 6- to 14-year old population and would present challenges to curriculum delivery. In the case of Ghana, the characteristically wide age-grade and over-age profile of students is likely to frustrate effective curriculum delivery and make dropout, repetition and low completion rates more likely. The influx of mostly over-age children exerts pressure on classroom level resources and diminishes the learning experience especially if attention is not paid to teacher preparation in which the over-age phenomenon is not factored into teaching large class sizes composed of children operating at different levels of cognitive ability.

CGs increased enrolments but the policy did not change the conditions that limit repetition and especially dropout hence the historically consistent levels of repetition and dropout (see Tables 1 and 2 below). Primary dropout rate prior to the introduction of capitation grants was about 5%, rose sharply from 2004 and by 2007/08 was still higher than the 2003 level. For JHS, the dropout rate in 2005 was nearly 20% and rose to about 28% in 2007. Compared to the previous year, the dropout rate for primary education increased in 2005 when CGs was introduced, but decreased in the case of the JHS. The influx of students and the pressure on infrastructure and teachers appears to have impacted more negatively on primary education than it did at junior high school level. What is clear is that dropout remains a fundamental problem in Ghanaian basic education, and the introduction of CGs had little effect on
reducing school dropout. If at the school level, CGs, in combination with other demand-driven measures is not fostering improved attendance and learner achievement, then it is unlikely to contribute to the achievement of EFA by 2015.

Generally, dropout rates are higher than repetition rates (Table 1 and 2) and at all grade levels (GDHS 2008). In lower secondary, i.e. JHS, dropout has been generally high averaging about 30% based on 2003 to 2007 figures. By 2007, the rate had declined to just about 10% points compared to the level in 2003. As pointed out earlier, transition at primary education level and school completion rates have not improved significantly even after CGs was introduced in 2005 (see, figure 1). It may be that the grants have not been large enough to cover the costs of improving quality that would lead to significant reductions in repetition and dropout, transition and completion.

Table 1: Primary Education, Completion, Repetition and Dropout

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>2,586,434</td>
<td>2,524,585</td>
<td>2,686,133</td>
<td>2,929,536</td>
<td>3,122,903</td>
<td>3,365,762</td>
<td>3,616,023</td>
<td>3,710,647</td>
<td>3,809,258</td>
</tr>
<tr>
<td>Completers</td>
<td>998,849</td>
<td>2,305,545</td>
<td>2,630,915</td>
<td>2,695,975</td>
<td>3,091,699</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comp. rate</td>
<td>77.9</td>
<td>78.7</td>
<td>75.6</td>
<td>85.4</td>
<td>88.0</td>
<td>86.3</td>
<td>87.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comp. rate</td>
<td>74.0</td>
<td>75.1</td>
<td>72.4</td>
<td>79.6</td>
<td>82.4</td>
<td>85.5</td>
<td>84.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Repeaters</td>
<td>177,330</td>
<td>148,518</td>
<td>152,726</td>
<td>170,777</td>
<td>195,288</td>
<td>243,625</td>
<td>139,820</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rep. Rate</td>
<td>6.9</td>
<td>5.9</td>
<td>5.7</td>
<td>5.8</td>
<td>4.3</td>
<td>5.9</td>
<td>6.7</td>
<td>3.8</td>
<td></td>
</tr>
<tr>
<td>Leavers</td>
<td>130,645</td>
<td>453,214</td>
<td>626,700</td>
<td>472,267</td>
<td>280,699</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dropout Rate</td>
<td>4.9</td>
<td>15.5</td>
<td>20.1</td>
<td>14.0</td>
<td>7.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: EMIS (World Bank 2011)

Table 2: JHS Completion, Repetition and Dropout

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>865,636</td>
<td>865,233</td>
<td>919,334</td>
<td>1,010,246</td>
<td>1,041,002</td>
<td>1,132,318</td>
<td>1,224,010</td>
<td>1,285,577</td>
<td>1,301,940</td>
</tr>
<tr>
<td>Repeaters</td>
<td>35,242</td>
<td>28,156</td>
<td>37,550</td>
<td>47,963</td>
<td>38,051</td>
<td>53,183</td>
<td>54,544</td>
<td>40,233</td>
<td></td>
</tr>
<tr>
<td>Rep. Rate</td>
<td>4.1</td>
<td>3.3</td>
<td>4.1</td>
<td>4.7</td>
<td>3.7</td>
<td>4.7</td>
<td>4.5</td>
<td>3.1</td>
<td></td>
</tr>
<tr>
<td>Leavers</td>
<td>348,570</td>
<td>356,135</td>
<td>192,010</td>
<td>344,261</td>
<td>340,812</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dropout Rate</td>
<td>37.9</td>
<td>35.3</td>
<td>18.4</td>
<td>30.4</td>
<td>27.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Completers</td>
<td>533,214</td>
<td>606,148</td>
<td>810,941</td>
<td>734,874</td>
<td>828,654</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comp. Rate</td>
<td>58.0</td>
<td>60.0</td>
<td>77.9</td>
<td>64.9</td>
<td>67.7</td>
<td>75.0</td>
<td>66.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: EMIS (World Bank 2011)

The CDD (2010) study reviewed earlier certainly called into question the effective use of CGS to impact positively on the quality of education provision in the schools it surveyed. Schools were inundated with a massive influx of students without the level of preparation that would ensure that the arriving students would be adequately accommodated to reduce the risk of dropout. The need for a greatly increased number of trained teachers, classrooms, and learning infrastructure was not anticipated. The percentage of trained teachers in public schools has declined since 2005 (Table 3). And as Table 4 also shows, PTR levels have
remained above 30%, and the pupil per teacher trained ratio (PTTR) after 2005 has increased (62.7 in 2005/06 to 67.5% in 2008/09).

Increased enrolments has implications for teacher workload, and without adequate support to address the potentially varied learning needs of a wide age-range of dropouts (re)entering school, learning outcomes are likely to deteriorate, increasing the chances of repetition and further dropout.
Table 3: Percentage of Trained Teachers - National

<table>
<thead>
<tr>
<th></th>
<th>2003/04</th>
<th>2004/05</th>
<th>2005/06</th>
<th>2006/07</th>
<th>2007/08</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>73.9</td>
<td>72.4</td>
<td>70.8</td>
<td>62.1</td>
<td>59.4</td>
</tr>
<tr>
<td>Junior High School</td>
<td>84.2</td>
<td>83.5</td>
<td>85.5</td>
<td>77.2</td>
<td>76.4</td>
</tr>
</tbody>
</table>

Source: Ghana EMIS

Table 4: PTR and PTTR – Primary Teachers

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PTR</td>
<td>32.1</td>
<td>31.4</td>
<td>34</td>
<td>34.9</td>
<td>35.7</td>
<td>33.5</td>
<td>34.1</td>
<td>32.4</td>
</tr>
<tr>
<td>PTTR</td>
<td>49.4</td>
<td>49.9</td>
<td>53.2</td>
<td>56.7</td>
<td>62.7</td>
<td>60.3</td>
<td>65.5</td>
<td>67.5</td>
</tr>
</tbody>
</table>

Source: Ghana EMIS

In effect, quality inputs especially trained teacher levels and PTRs did not improve as enrolments increased after the CGS. Without improvements in the quality and quantity of teachers as demand increased quality was bound to suffer even more. This really has been the tragedy of the CGS as the necessary preparation and investments were not made before the campaign to increase demand began. A similar result occurred Vietnam in 1996 when it attempted reform without attending to preconditions for the improvement of education quality. Initially it set up unrealistic goals which included “a large expansion in the size of the system for rapid universalization and the provision of education subsidies for all” (Nguyen & Nguyen 2008, p 117). Reforms became more successful when the focus shifted to universalization of primary education at the correct age with sufficient teachers for the growth of the education system. Vietnam placed a high premium on improving education quality by introducing reforms that overcame “weaknesses in pre-service and in-service training, deployment, organisation, utilisation of teachers” (Nguyen & Nguyen 2008, p. 141). The country continues to witness a situation where number of trained teachers continues to rise at the primary level even though the number of primary students is declining because of demographic changes. The opposite has been true in Ghana, where educational expansion especially through the introduction of CGS occurred without serious attention to improvements in teacher supply, effective deployment and enhanced working conditions for teachers (Akyeampong 2010).
9. The effect of CGS on Participation in Two Districts of Ghana

As part of fieldwork activities in Ghana, CREATE collected student attendance data from 2005 when CGS was introduced. This data is analysed for insights into patterns of attendance and to investigate further, using a small sample of schools, whether there has been a positive stabilisation of attendance throughout the school cycle that might signify school level changes due to the CGS. Before looking at this data, it is instructive to highlight the structure of access and attendance in the two districts that schools were sampled from. The Ghana component of CREATE focused on two districts, Mfantseman in the Southern coast, and Savelugu-Nanton in the Savannah North. Both districts were purposely selected because they rank among the poorest districts in Ghana, but also because they have low GERs (below 60%) at the time CREATE work began in 2006.

The Ghana Core Welfare Indicators Questionnaire (CWIQ) (2003) included questions on attendance at school and on reasons for non-attendance. Oduro (2007) re-analysed this data and revealed the following about the two districts:

- The patterns of access to basic education differed quite dramatically between the two districts on the basis of CREATE’s zones of exclusion.
- The proportion of children that had never attended school is significantly higher in Savelugu-Nanton than it is in Mfantsiman (Figures 9 and 10).
- Furthermore, about 34 percent of 10 year olds had never attended school in Savelugu-Nanton compared to about 5 percent in Mfantsiman district.
- The proportions at each age group in Savelugu-Nanton are sometimes about half the proportion in school in Mfantsiman district.

Given the very high incidence of children that have never attended school in Savelugu-Nanton, it comes as no surprise that an almost insignificant proportion did not complete school in the past or did not proceed to junior secondary.
Research in Northern Ghana suggests that the likelihood of children enrolling is dependent on a complex mix of factors including the educational level of parents and the types of livelihoods households pursue. Besides, education is sometimes seen as one among a range of means of securing children’s long-term welfare, which means that the ability and desire of households to educate their children will, to some extent, depend on parental assessment of education as a livelihood strategy, and by the need to secure and protect the household’s immediate well-being (see Hashim 2005). Migration and fosterage are other phenomena which are known to influence attitudes to schooling in Northern Ghana (see Caine 2011; Fentiman, Hall & Bundy 1999). Hashim (2005) found that in the North, education was not implicated in ‘normal’ childhood in the same way, and the inability to attend school was not perceived as an opportunity denied. Thus, constructing the problem of non-attendance simply in terms of costs underestimates other important considerations that can influence attendance and dropout.
Mfantseman district (municipality) largely consists of subsistence farmers and fishermen. Child labour is high and it has better health care facilities than in Savelugu-Nanton. Unemployment and underemployment is high, but the district is characterised by vibrant fishing communities that attract children into short-term labour and migration (Ananga 2011). The profile of the two districts suggests that the challenges of improving access in the north in some respects will be different from what will be required in the south.
10. Tracking Attendance

CREATE tracked pupil attendance in grades 1, 4, 6, & JHS1 in selected schools in two districts for three years. In the Mfantseman district, out of the total of 1069 pupils tracked about 17% had dropped out by 2009/2010, with the highest dropout occurring in primary 1 and 4 - 19% and 18.8% respectively (Table 5). Overall dropout in Savelugu-Nanton was not much different to that of Mfantsman - about 16% out of 1470 tracked pupils. The primary 6 cohort registered the highest dropout (about 31%) and the JHS1 cohort dropout was about half that of the Mfantsiman JHS1 cohort. It is important to notice that after about two years of capitation i.e. 2007/08, schools in our sample were still registering high dropout (highest in 2007/08 for Mfantsiman district and highest in 2008/09 in Savelugu-Nanton). In the three years that attendance data was collected we found no consistent downward trend in dropout. The phenomenon appears to be quite erratic.

Table 5: Dropouts by cohort in Mfantseman District

<table>
<thead>
<tr>
<th>Cohort Grade</th>
<th>Starting Enrolment</th>
<th>2006/07</th>
<th>2007/08</th>
<th>2008/09</th>
<th>2009/10</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary 1 cohort</td>
<td>331</td>
<td>15</td>
<td>14</td>
<td>34</td>
<td>63</td>
<td>19.0</td>
<td></td>
</tr>
<tr>
<td>Primary 4 cohort</td>
<td>292</td>
<td>29</td>
<td>7</td>
<td>19</td>
<td>55</td>
<td>18.8</td>
<td></td>
</tr>
<tr>
<td>Primary 6 cohort</td>
<td>221</td>
<td>8</td>
<td>5</td>
<td>18</td>
<td>31</td>
<td>14.0</td>
<td></td>
</tr>
<tr>
<td>JHS1 cohort</td>
<td>225</td>
<td>27</td>
<td>1</td>
<td>0</td>
<td>28</td>
<td>12.4</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1069</td>
<td>79</td>
<td>27</td>
<td>71</td>
<td>177</td>
<td>16.6</td>
<td></td>
</tr>
</tbody>
</table>

Table 6: Dropouts by cohort in Savelugu-Nanton District

<table>
<thead>
<tr>
<th>Cohort Grade</th>
<th>Starting Enrolment</th>
<th>2006/07</th>
<th>2007/08</th>
<th>2008/09</th>
<th>2009/10</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary 1 cohort</td>
<td>474</td>
<td>13</td>
<td>31</td>
<td>16</td>
<td>60</td>
<td>12.7</td>
<td></td>
</tr>
<tr>
<td>Primary 4 cohort</td>
<td>368</td>
<td>10</td>
<td>34</td>
<td>11</td>
<td>55</td>
<td>14.9</td>
<td></td>
</tr>
<tr>
<td>Primary 6 cohort</td>
<td>335</td>
<td>26</td>
<td>54</td>
<td>23</td>
<td>103</td>
<td>30.7</td>
<td></td>
</tr>
<tr>
<td>JHS1 cohort</td>
<td>293</td>
<td>8</td>
<td>12</td>
<td>0</td>
<td>20</td>
<td>6.8</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1470</td>
<td>57</td>
<td>131</td>
<td>50</td>
<td>238</td>
<td>16.2</td>
<td></td>
</tr>
</tbody>
</table>

Source: Ampiah et al., (2011)

Data on attendance by grade for all the participating schools by gender starting in 2005/06 was plotted and the patterns are revealed in Figure 9. First of all it shows that enrolments have not stabilised and there is a consistent pattern of dropout and drop-in right as pupils have progressed from the year capitation was introduced. There is a slight downward trend in enrolment for girls in Savelugu-Nanton whereas for boys there is more stability – for boys primary 1 enrolment kept up and primary 2 it actually increased. For girls in Mfantsiman, there was a drop in enrolment for the cohort in the first three grades - in other words, enrolment after four years was much lower than at the start. Enrolment trend for boys in Mfantsiman was generally better than for girls. These erratic enrolment trends since the
introduction of capitation is suggestive of the inability of the school system to hold onto pupils once they enrol, but more importantly, it suggests that capitation is not delivering improved internal efficiency in terms of the use of the grants to improve quality. This slice of enrolment patterns by grade and gender also shows that boys have fared slightly better than girls in terms of consistent enrolment. The patterns are consistent with the dropout figures captured in Tables 3 and 4. They suggest that besides capitation there will have to be other measures that will stimulate and sustain demand in a targeted way. These findings are also consistent with the World Bank’s assessment of the capitation grant policy:

“By 2008 … growth in enrolment and in gender parity levelled out and by this time, dropout and even some learning outcomes had started to decline as the first post Capitation Grant generations started to reach 3rd and then 4th grade. This was the result of the large influx of poor students whose parents started to feel negative economic consequences, and overage students, who have had some difficulty staying in school. There has been some slowdown in initial admissions and inflation has also started to erode the value of the Capitation Grant. In 2008, the Government increased the Capitation Grant to 4.5Ghc” (World Bank 2011, p 118).

Figure 11: CREATE tracking data – Enrolment by Grade and Gender

<table>
<thead>
<tr>
<th>Boys-Mfantseman</th>
<th>Girls-Mfantseman</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Graph" /></td>
<td><img src="image2.png" alt="Graph" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Girls – Savelugu-Nanton</th>
<th>Boys-Savelugu-Nanton</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image3.png" alt="Graph" /></td>
<td><img src="image4.png" alt="Graph" /></td>
</tr>
</tbody>
</table>
As other evaluation studies of the Capitation Grant indicates, increasing the amount is not necessarily the solution – it is whether schools get the funds in good time, and all of it, so that they can fulfil the goals set in their school improvement plans. Also, schools need to be much more aware of the background of children who are returning to school after dropping out, and those who have never enrolled as these two groups have different learning needs. As Ananga (2011) puts it in his work on dropouts: “Indeed, it would be irresponsible, impossible and a waste of resources to pursue any intervention aimed at facilitating the rehabilitation of dropouts into the education system without first reaching an understanding of how their daily experiences in and out of school shape their aspirations in terms of education, work and economic well-being” (p 8). What the Capitation Grant actually does is to bring a large pool of children back into school who had earlier dropped out. Once in there with those who have never attended school, the challenges teachers face in teaching this mixed group compounds. The research also suggests that poor school environment (lack of toilet facilities) and classroom conditions affect girls learning and participation in education more than boys (Glick & Sahn 2000). Also, the erratic picture of enrolment in the CREATE tracking sample may be the effect of over-age attendance interacting with seasonal economic activity, which then leads to temporary dropout. There is evidence that by age 13, children from economically deprived backgrounds, are likely to dropout and migrate to areas with economic activity (Hashim 2005). Research by Ananga (2011) does show that once dropouts have enrolled, unless there is an understanding of the circumstances that led to them leaving school in the first place, leading to appropriate steps at school level to address their learning needs, many are likely to drop out again and eventually stay out of school permanently.

Sabates et al (2010) investigated the interaction between over age and school attendance using tracked attendance data from the Mfantsiman school sample. The study tested whether there is a differential association on school performance over time for children who are over age but attend school as compared to children who are not over age but also attend school. The results showed that a relationship exists between over age in school and school attendance, whereby children in their correct age-in-grade attend school more regularly than over age children. Put alongside Ananga’s (2011) finding that irregular attendance is a precursor to eventual or permanent dropout, over-age enrolment requires urgent policy response if the initial positive impact of the CGS is to be sustained to produce high attendance and completion rates.

The differences in the patterns of the exclusion zones in Mfantsiman and Savelugu-Nanton districts (Figures 9 & 10), and the enrolment profile from CREATE tracking data show the importance of designing interventions to address particular situations in different parts of the country. In other words, targeted interventions that are evidence-based are needed if increased enrolment is to translate into high attendance and completion. To change the pattern of high enrolments that dissipates into low participation and dropout, future interventions need to focus on improving school efficiency and effectiveness (Lewin & Akyeampong 2009).
In Savelugu-Nanton the issues with respect to access to basic education may be prioritised as follows:

1. First, because of the large out of school population in the district, it is important to increase capitation substantially to increase the number of entrants into school,

2. Second, create more awareness of the importance of age in grade entry with the aim to increase the age of entry into school,

3. Third, ensure that once children enrol they remain in school. In particular, pay attention to girls who enrol to ensure that their attendance is consistently high to reduce their chances of dropping out. More attention needs to be given to making schools more ‘girl-friendly’ by improving facilities and creating awareness among teachers about behaviours and practices (e.g. caning) which discourage girls’ attendance on a regular basis. The gender dimensions of access to education differ between the two districts. The challenge in Savelugu-Nanton and in districts with similar gender biases is not only to increase overall participation in schooling but also to devise intervention measures to address the bias against girls.

In Mfantsiman district the ranking of priorities may be different.

1. The first challenge is to ensure that children remain in school and the second is to ensure that children enter school at six years whilst the third priority is to increase the number of entrants into school.

2. A higher proportion of children in Mfantsiman district compared to Savelugu-Nanton have not completed primary school. This is not really an issue yet in Savelugu-Nanton because of the higher proportion of children who have never attended school. But as the CREATE tracking data showed, once enrolled, more children in Savelugu-Nanton tend to stay. This means that using a more improved system of Capitation Grant whereby the amount is increased substantially and is efficiently delivered to schools to carry out their improvement plans is critical.
11. Conclusion and Recommendations

The introduction of Capitation Grant as a demand-side intervention to improve access works up to a point – its success lies in pulling a large group of out of school children back into education. As the evidence discussed in this paper shows the greater challenge is to eliminate dropout. The age of entry and regular attendance lie at the heart of the story about unsustainable access. As Lewin and Akyeampong (2009) have argued, “unless new strategies and policies reflect a deeper understanding of the factors which influence the structure and patterns of access in particular countries, history will repeat itself and short-term gains [which is what the Capitation Grant produces], will be overshadowed by persistent patterns of repetition, overage enrolment, dropout, and low transition rates into the next educational level” (p 149). In fact, a system unprepared to deal with the surge in enrolments through increased infrastructure and incentives to reward schools that achieve internal efficiency and effectiveness, may find that the Capitation Grant actually creates more problems for future attempts to improve enrolment. If the problem of dropout and overage enrolment is not tackled through a set of policies that reduce their effect then it is unlikely the structure and pattern of access in Ghana is changed for a long time. Again as Lewin & Akyeampong (2009) have argued, “demand-side failure may become more likely as enrolment rates increase if the marginal benefits of continued attendance diminish” (p. 150).

It is instructive in concluding this (re)assessment of the CGS in Ghana to highlight what Vietnam did to particularly tackle its problem of over-age enrolment and how that accelerated progress towards EFA.

- “To fulfil the regulations stipulated in the Primary Education Universalization Law in 1991 (that is, every child must complete primary school by the age of 14 at the latest), for the past 10 years, September 5 has been chosen as the “Day for bringing children to school”, with the aim of encouraging all families with six year-old children to enrol their child in grade one. In 2000, the enrolment rate for 6 to 11 year olds was 95%; this figure was more than 98% in the 2004-2005 year … for the period up to 2010, the objectives for primary education [was to] achieve the goal of universalization of primary education with students of the correct age (attracting 99% of the children to enrol in schools and reducing the repetition and dropout rates … to improve the quality and efficiency of schooling … to reduce the student-to-teacher ratio and class size” (Nguyen & Nguyen 2008 p. 125)

- Enrolment at the correct age was fulfilled on a phased basis. Before 2000, the objective was that most 14-year-old children would complete primary school. From 2000 onward, the objective [was] that most 14 year old children would complete primary school at the right age, that is, correct-age universalization (p. 133).

The story of the impact of Capitation Grant is a wakeup call for the following:
1. Identifying policies and strategies that not only increase gross enrolment but also make schools more efficient, investing in teacher quality and quantity, and laying the foundations to make over-age enrolment a thing of the past.

2. Increasing capitation to poor districts and using the funds to improve the supply of quality inputs at school level.

3. Ensure faster delivery of capitation to schools while ensuring accountability in the use of the funds. It is important to find an accountability system that does not overly bureaucratize the administration of the CGS.

4. Tackle the problem of over-age enrolment head-on. This will require a phased strategy as was done in Vietnam, based on a short to long term strategy. In the short term, raise awareness of the problem in each district. A profile of over-age enrolment should be developed for each district and school upon which local level strategies are introduced to ensure that teachers pay particular attention to the learning needs. This should be included in a strategy to produce accurate records on school attendance with an in-built mechanism to warn schools and districts when attendance drops below an acceptable threshold. In other words, schools and districts should be resourced to track attendance, monitor progress in learning, and introduce incentives for students to keep their attendance high.

5. As part of a long-term strategy, the emphasis of future enrolment policy is to achieve universal basic education at the correct age, as was done in Vietnam. Raising public awareness of the benefits to households and society to enrol at the correct age should be intensified, and perhaps a special day at the beginning of the academic year designated for enrolling in grade one at age 6. Schools and Districts should be provided with resources to take the initiative to go into local communities to register pupils who are six-years of age. This may be helped by improving the system of records for births in all local health centres and sharing that information with the district office. A high value is placed on national immunisation of children because of the risk of disease and infant mortality and its impact on national development. Enrolling children at the correct age should be placed on the same level of national importance and resources allocated to eradicate the problem as a long term development strategy.

Finally, the case of Mfantseman and Savelugu-Nanton suggests that, we need a better understanding of the underlying causes of poor enrolment and the most effective and efficient ways of bringing about lasting change. Ghana has characteristically three different ecological zones – a sandy coastline backed by a coastal plain; a middle belt and western parts heavily forested, and an undulating savannah to the North (Ghana Statistical Service 2003). Research is needed to understand the particular challenges to access in these ecological zones, together with an understanding of the economic pull factors that make sustained access difficult. The
fact that in a place like Savelugu-Nanton, once children enrol their chances of staying on is better than say in Mfantseman means different access strategies are required.

As the evidence in the paper has demonstrated, capitation by itself is an insufficient strategy to universalise basic education. The challenges to access run deeper than removal of the direct costs to education for poor households. In the first place, the policy should prioritize the poor through increase investment that disproportionately favours this group. We also need to significantly improve, maintain, strengthen, and consolidate the achievements of universal primary and junior high school education, maintain a focus on improving education quality in basic education by reducing the repetition and dropout rates and set a reasonably high target for completion especially in socioeconomically disadvantaged communities. Finally set targets after appraising local level capacity to achieve universal basic education at the correct age. None of these recommendations can be achieved without a high capacity level monitoring and evaluation system at national and district level focused on these targets and goals. Districts should set up steering committees to monitor progress and adjust strategies to meet new challenges. There is no point introducing a policy of free basic education if that policy is not protected from decline by other policies (e.g. increase in trained teacher production and effective deployment backed by an attractive incentive system to retain teachers). It is deceptive to understand the impact of the CGS simply in terms of increased enrolments – a proper assessment should always go with the effect on repetition, dropout and completion rates.
References


Centre for Democratic Development 2010.

(Re)Assessing the Impact of School Capitation Grants on Educational Access in Ghana


Ghana Statistical Service (GSS) 2003 Core Welfare Indicators Questionnaire, Accra: Ghana.


Senegal AfriMAP Report (2010)


West, A. Sparkes J. and Balabanov T. 2000 Demand-side financing – a focus on vouchers in post-compulsory education and training: discussion and case studies.


Report summary:
This paper examines the effect that introducing a capitation system to fund non-salary expenditure has had on participation and on investment in improved quality. The principle behind introducing capitation was that it would eliminate the need for households need to pay fees for basic education and that it would make it possible for schools to have access to funds to improve the quality of education. Available education statistics suggests that in its first year the introduction of capitation grants produced a seismic shift in demand as intended by the policy. Subsequently it has become clear that drop out rates have not fallen and that many of the recent entrants are seriously over age. It also appears that delays continue to be experienced in disbursement, and that anticipated investments in quality have yet to bear fruit. The research leads to policy relevant conclusions to act to reduce high levels of over age enrolment, direct higher rates of capitatio to the poorest areas, and provide complementary interventions especially in relation to improved teacher deployment and utilisation.

Author notes:
Dr Kwame Akyeampong is Senior Lecturer in International Education at the University of Sussex who has written extensively on teacher education, education and development in sub-Sahara Africa, and basic education provision in low-income country contexts. He has consulted for DFID, JICA, the World Bank, and Ministries of Education in Ghana and Rwanda. Currently, he is a principal investigator on a William and Flora Hewlett Foundation research project on Teacher Preparation and Continuing Professional Development in Africa (TPA/FICEA)

Address for Correspondence:
CREATE, Centre for International Education
Department of Education, School of Education & Social Work
Essex House, University of Sussex, Falmer, BN1 9QQ, UK.
Website: http://www.create-rpc.org / Email: create@sussex.ac.uk