

PRELIMINARY EDUCATION SECTOR PERFORMANCE REPORT

Ministry of Education

May 2011

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INTRODUCTION

The 2010/11 Preliminary Education Sector Performance Report (PESPR) sees the introduction of a slightly new format to the report. In response to discussions with key stakeholders within the education sector in Ghana it was decided that a new framework should be adopted to enable readers to more easily gain an oversight of sector performance in the lead up to the annual review. This new format is designed to be more data driven, to support the Ministry of Education's wider commitment to undertaking evidenced based policy making. Key indicators are presented for each of the eight policy objectives outlined in the most recent Education Strategic Plan (2010-20):

THEMES	POLICY OBJECTIVES
A: Socio-humanistic (<i>access, equity, welfare</i>) (demand)	1. <i>Improve equitable access to and participation in quality education at all levels.</i>
	2. <i>Bridge gender gap in access to education</i>
	3. <i>Improve access to quality education for people with disability.</i>
	4. <i>Mainstream issues of population, family life, gender, health, HIV / AIDS/ STI, conflicts, fire and road safety, civic responsibility, Human rights and environment in the curricular at all levels.</i>
B: Educational (<i>quality, skills development</i>) (demand)	5. <i>Improve quality of teaching and learning</i>
	6. <i>Promote Science and technical education at all levels.</i>
C: Economic (<i>efficiency, effectiveness</i>) (supply)	7. <i>Strengthen links between tertiary education and industry.</i>
	8. <i>Improve management of education service delivery.</i>

The selection of indicators was undertaken by the Ministry of Education in consultation with a wide range of stakeholders. Trend data for the past five years is presented for each indicator. In addition the indicator is also reported for the deprived districts for Basic Education. This is the first year for which EMIS is reporting data for the new list of 170 districts, which includes 61 deprived districts compared with the previous 53. The somewhat intuitive nature of aligning deprived districts in the newly created and amended districts mean that it is not possible to make comparisons with deprived district data for previous years. As such, the data for deprived districts is provided solely for the current year, where it will form a new baseline. Key targets that the education sector has signed up to are also included and progress towards these reported.

The report is arranged by each policy objective. Due to the number of indicators decided upon, each policy objective includes a summary of main findings which details the developments in the different levels of education with respect to the objective. It is intended that this summary can be read in isolation to provide a narrative of recent developments within the sector. The time trend for each indicator is then presented for each level of education to provide the reader with more detailed information, particularly with regards to historical trends.

The majority of the data in this report is from the EMIS annual school census (2010/11 and preceding years for historical analysis). Outside agencies were also contacted for information in those sectors where EMIS coverage is more limited: non formal education, tertiary and special education.

As the PESPR is designed to inform and guide the discussions at the NESAR, some key issues are highlighted after the main findings for each policy objective.

DATA

The majority of the data used in this report is from the EMIS School Census (various years) and thus the data source is EMIS unless explicitly stated. Some features and limitations of the data considered in this report are outlined below.

Adjustment of enrollment figures

The enrolment figures quoted in this report are adjusted to 100% coverage. The formula for adjustment used by EMIS is as follows:

Adjusted Enrolment = [(Recorded Enrolment / No. of Responding Schools) x No. of Non-Responding Schools] + Recorded Enrolment

The basic education data is adjusted on a district by district basis and then summed up, and the SHS data is adjusted separately for public and private schools.

New census baseline

The 2010/11 EMIS data uses the new GSS census population data when calculating enrollment rates. The 2010 data forms the new baseline with a revised growth rate of 2.4 per annum, compared with the previous 2.7. This means that comparisons across the preceding years must be undertaken with some caution. There had been concerns before the census was undertaken that the population growth rate was too high and thus that the population data used in calculating the enrolment rates in recent years had been overestimated, placing downwards pressure on the rates. An increase in one of the enrollment rates from 2009/10 may thus reflect the return to a more accurate population level on the denominator. This could potentially explain the observed phenomena in some enrollment rates of a temporary decline in 2009/10 but a return to a positive growth trend in 2010/11.

District level population data will not be available from GSS for the new list of 170 districts until approximately March 2012. Thus EMIS undertook an approximation of population levels for the “new” districts within each region based on the proportion of the school enrollment within these districts. GSS confirmed that this was an appropriate approximation method. Disaggregating indicators to the district level however reveals inconceivably high enrolment rates at the upper end of the distribution, caused by the approximated population rates. District level analysis to identify the spread of enrollment rates was

thus not reported. Data for deprived districts were still considered however, as it was hoped that in considering 61 districts the impact of approximations in the new districts would be lessened.

Data limitations

It was not possible to report fully on all indicators due to data constraints. There are a few gaps in the historical EMIS data where data was not readily available for the missing years. It is however hoped that these will be filled in time for publishing the final report. Timeliness of data provision has been a problem with the outside agencies, despite providing significant forewarning of what data was required and when. Some indicators or the most up to date figures are thus missing, but will again be included in the final report. No data was received from SpED for current enrolment or historical quality indicators. NCTE were only able to provide enrolment data.

A delay in the deployment of National Youth Employment Programme staff for the current academic year mean that they were not included in the census, where they are classified as untrained teachers. The 2010/11 EMIS data reveals a decline in untrained teachers of 68,702 teachers at the basic level, but it is currently unclear what proportion of this decline is due to the omission of NYEP staff. This has caused sharp increases in PTR, compared with recent trends and inflated values for the percentage of trained teachers.

Data relating to TVET is collected by EMIS, but the wide and disparate scope of TVET mean that the information collected on these institutions is rather unwieldy and thus at present the number of suitable indicators is quite limited. Discussions with EMIS staff reveal that there is perhaps a need for future dialogue about the data requirements for TVET in order that the questionnaire can be realigned with these priorities.

Adopting a data driven report is part of the Ministry's wider commitment to undertaking evidence based policy making. In collating the indicators it is apparent that there are some important areas for which there is currently no data. A notable example of this is teacher absenteeism rates, which the literature suggests is a significant and growing problem in Ghana. Plans are however underway within the Ministry to collect data on this through the EMIS school census and the school report card to enable reporting on these indicators in the future.

THEMATIC AREA: SOCIO-HUMANISTIC

The Socio-humanistic thematic area focuses on issues within the education sector addressing access, equity and welfare. The area includes four of the eight policy objectives:

Socio-humanistic: Policy Objectives
1. Improve equitable access to and participation in quality education at all levels.
2. Bridge gender gap in access to education
3. Improve access to quality education for people with disability.
4. Mainstream issues of population, family life, gender, health, HIV / AIDS/ STI, conflicts, fire and road safety, civic responsibility, Human rights and environment in the curricular at all levels.

Policy Objective 1: Improve equitable access to and participation in quality education at all levels.

One of the major successes within the Ghanaian education sector in the past decade has been the significant improvements made in ensuring access to education, particularly at the basic level as part of the government's commitment to Free Compulsory Universal Basic Education (FCUBE). The government is currently implementing a number of policies to increase access to education. These include the capitation grant, school feeding programme (including take home rations in WFP programme in the northern regions), free school uniform and free exercise books programme. Despite the strides made in improving access and the initial optimism about securing the goal of Universal Basic Completion by 2015, growth rates in enrollment have in recent years shown signs of slowing and the target is unlikely to be met. The slowdown in enrolment growth is in part due to the more complex problems that the remaining out of school children are likely to be subject to and the greater challenge of ensuring that children once in school stay beyond the first few grades. Of greater concern is the recent evidence of declining enrollment and admission rates in some levels of basic education, which first arose in 2008/9 and persists for some indicators in 2010/11.

MAIN FINDINGS

Basic Education

Despite continued interventions to increase access in basic education there has been an overall slowdown in growth of enrollment and admission rates, with some indicators even declining. Considering the historical trends in GER, only KG is on track to achieve the medium term targets and thus 2015 goals for GER. Some slowdown in growth of enrollment rates is to be expected as the sector approaches universal enrolment, as the pupils remaining outside the education system despite recent interventions are likely to face more complex barriers to education.

Kindergarten

Enrolment in Kindergarten has increased since 2006/7, though growth rates are slowing. Enrolment rose by 4% in 2010/11, which represents a halving of the growth rate observed in the previous year. The increase in enrolment has kept pace with the population, with the GER steadily increasing over the last five years and increasing by one percentage point in 2010/11 to reach 98.4. This indicates a positive trend of enrolment in out of school children. The growth rate in GER has however slowed, mirroring the trends in enrolment. The enrolment of children of the appropriate age had also been increasingly steadily, before dipping by five percentage points to 58.7 in 2009/10, but the NER increased to 60.11 in 2010/11.

Primary

Growth in Primary School enrolment has increased in 2010/11, from a growth rate of 3% observed in the two preceding years to 4% for 2010/11. The growth rate was however almost double this at the outset of the period in 2006/7. The increase in enrolment growth means that for the first year since 2007/8 enrolment has outpaced population growth, indicating that enrolment of out of school children has increased. GER has increased to 96.4 after a period of stagnation at 94.9. Some of this increase may be due to the use of updated population figures as explained earlier. Despite the increasing enrolment, the proportion of correct age pupils in Primary schools has continued to decrease after peaking in 2008/9 at 88.5. The NER has fallen by more than 5 percentage points in 2010/11 to 77.9. If the NER for the previous rate was deflated by the higher population growth rate in use, the decline in the relative age appropriate enrolment could be even greater. Considering the significant problems caused by overage enrollment reported in the literature this is a troubling trend for the overall goal of securing universal primary completion. It is however important to note that in the absence of universal birth registration in Ghana, the reliability of age based data used in calculating NER and NAR cannot be assured.

The admissions data for Primary however presents more cause for concern. Enrolment in P1 has increased by only 0.64% in 2010/11. This increase in admission was not sufficient to keep up with population growth, leading to a decrease of almost two percentage points in GAR, which fell to 99.6. The declining trend observed since GAR peaked at 107.1 in 2007/8 is of particular concern as it will impact on the subsequent grades in coming years. The current decrease in the GAR at the primary level may be due to the initial inflation in GAR following the removal of fees and introduction of capitation grants, which led to an influx of primary school admissions. A proportion of the growth in admission in these first years will have been from a relatively large pool of overage out of school children, with time from the introduction of these policies the size of this pool will decrease as these out of school children enrol or become too old to consider joining P1, meaning that the rate decreases. The decrease in GAR could thus be seen as a reversion to a more sustainable growth rate. The proportion of children of the correct age starting primary school has stagnated in 2010/11 after exhibiting a much smaller decline than GAR over the same period. The fact that the greatest decline in enrolment has been in overage children in recent years lends some weight to the preceding argument.

The completion rate for primary school attempts to assess the relative enrolment at the last stage of Primary, to measure the provision of meaningful access, beyond the first few grades of education. This is also a vital indicator in the government's commitment to universal basic education. Completion rates have increased from 85.5 in 2007/8 to 91.6 in 2010/11 and have surpassed the AESOP target for 2010/11, suggesting that Ghana is on target to achieve universal primary education. The declining admission rates observed in recent years, which have now fallen below 100, risk derailing the progress made in raising completion rates to reach this target and require careful oversight.

JHS

Enrolment in JHS has continued to rise, and in line with Primary, the growth rate has recently increased from a low of 1% in 2009/10 to 3% in 2010/11, though growth rates were higher at the outset of the five year period under consideration. The increase in the growth of enrolment has halted the decline in GER observed in 2009/10, and GER increased by 0.1 percentage points to 79.6 in 2010/11. Despite the renewed growth in enrolment, the proportion of children of appropriate age in JHS has continued to decline, with NER falling to 46.1. The decline in NER in JHS preceded the decline at the Primary level, so it is not just a factor of the lower proportion of correct aged Primary graduates feeding into JHS.

The GAR had been increasing at JHS until 2010/11 when a small decline of 0.3 percentage points brought GAR to 86.3. The recent decline in the GAR at JHS is surprising considering the increase in the completion rate at primary school, which should expand the pool of students available for enrollment in JHS1. The transition rate from P1 to JHS1 has however experienced a sustained decline since 2006/7, falling from 101 to 92 over the period. The increase in graduates from P6 therefore has not translated into a proportionate increase in JHS entrants. It is unclear whether JHS provision has been unable to keep pace with the increase in primary completers or whether the decreased transition rate is due to falling demand for JHS. This trend is however of concern if universal basic education is to be achieved. The NAR in JHS has experienced little change over the five year period, fluctuating between 44 and 45.

The completion rate for JHS has increased by one percentage point to 66.9 after falling by 9 percentage points in the previous year. The rate however lies significantly below the AESOP target for 2010/11 and thus the potential for the sector to reach universal basic completion by 2015 is very unlikely to be met. Comparing the completion rate (GER for JHS3) with the GAR (GER for JHS1) reveals that the completion rate is almost 20 percentage points below the GAR, indicating that there is substantial attrition of pupils across JHS. Promotion rates are presented in Policy Objective 5 (Improving Quality) and these reveal that the major weakness within JHS is in the transfer from the second year to the third year with a promotion rate of only 78%. Although the completion rate has stagnated at JHS, the transition rate from JHS to SHS has been increasing since 2007/8, with an increase of 8 percentage points on last year.

Second cycle

In contrast to basic education, growth in enrolment for SHS has been increasing in recent years, as the expansion in access to basic education feeds into SHS. 2010/11 is the first year in which there are four grades within SHS meaning that comparisons are not possible in raw enrolment. The GER however reveals that the increase in enrolment for all grades has kept pace with the population as it continued to

increase to 36.5. The rate of growth in GER has however slowed. In order to reach the medium term target of 40%+ outlined in the AESOP within the next two years the GER must grow by more than 1.75 percentage points per year over the next two years. This will not be achieved if the slowdown in the growth rate of GER continues. NER data is currently only available for 2010/11 and it stands at 24.4. Completion rates for SHS have increased marginally since 2006/7, but stagnated in the past two years.

Enrollment in TVET exhibited a downwards trend between 2006/7 and 2009/10, however the 13% increase in enrollment observed in 2010/11 has outweighed the previous years of decline.

Tertiary

Enrollment in Public Universities and Polytechnics has been increasing since 2006/7, though data is not available for the current year. Enrollment growth at the Public Universities has slowed in the year 2009/10 whilst the rate of growth in enrollment in Polytechnics increased. Enrolment in the Colleges of Education has fluctuated between 26,000 and 28,000 students.

Non formal education

Enrollment in Non Formal Education fell sharply in 2007/8 after World Bank Project funding ended. Since the end of the World Bank project the funding of NFED has been mainstreamed in GoG and the programme has subsequently experienced an annual expansion of 12% on average. The enrollment data for 2010/11 is currently not available, only the target enrollment of 20,000 male pupils and 30,000 female pupils. Due to budget constraints the non formal education has not collected data of retention rates and graduation rates for their programmes. As a result, the quoted enrollment rates assume no dropouts in the second year of the 21 month programme cycle. It is to be expected that these enrollment rates are thus an upper bound estimate. It is of vital import that the division begins collecting data on such basic features of the programme as retention and completion to enable an accurate measurement of performance.

Areas of concern: issues for discussion at NESAR

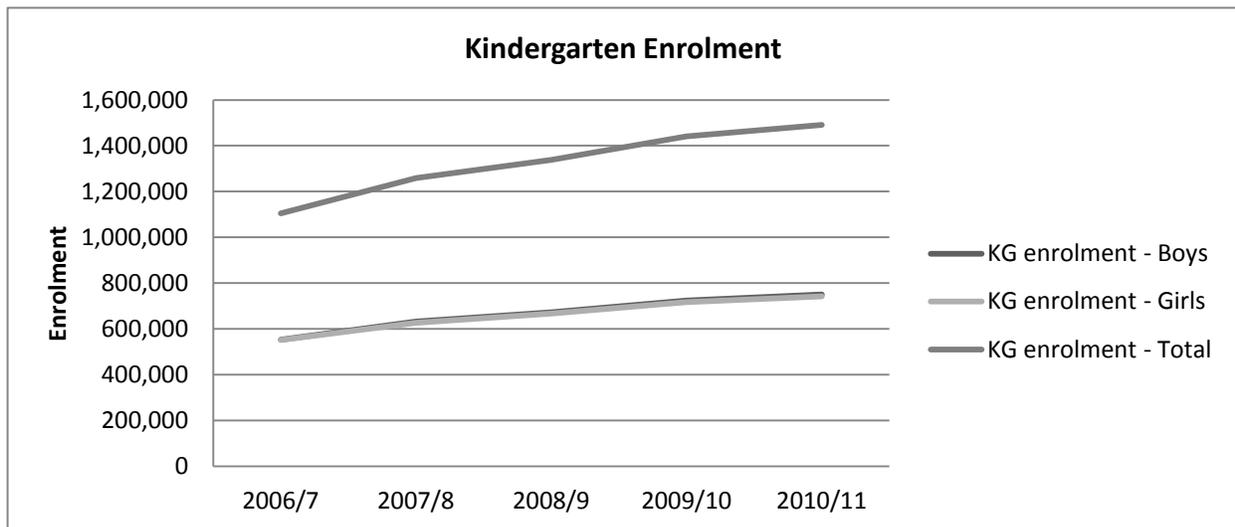
- The slowdown in enrolment growth observed at all levels of basic education reflects the significant challenge the education sector faces in trying to expand access to the remaining out of school children. Alternative approaches may be required to include this hard to reach group, including scaling up Complementary Basic Education as a public-private partnership under GES.
- The capitation grant policy was a crucial part of the government's success in expanding access to basic education. A number of amendments to the policy have been raised by schools and stakeholders to maximize the impact of the intervention on enrolment. Schools with low enrolment complain that the grant is not sufficient for their needs and advocate the need for the introduction of a base grant per school. The size of the grant is a matter of concern for most schools. The grant may thus be more effective if it was targeted at deprived areas with low enrolment rather than delivered as a universal intervention.
- The continued decline in NER observed in Primary and JHS in 2010/11 is a troubling trend which requires further scrutiny.

- The completion rate for JHS is substantially below the target for achieving universal basic completion by 2015. Increasing retention should thus be addressed as a priority.

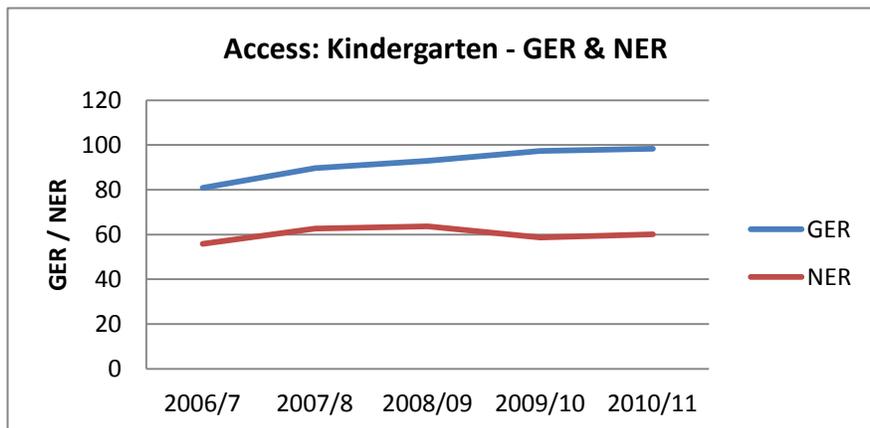
BASIC EDUCATION

KINDERGARTEN: ACCESS

Kindergarten – Access	2006/7	2007/8	2008/09	2009/10	2010/11	Deprived
KG enrolment - Boys	552,995	632,421	671,822	723,833	749,764	
KG enrolment - Girls	551,784	626,062	666,632	716,899	741,686	
KG enrolment - Total	1,104,779	1,258,483	1,338,454	1,440,732	1,491,450	
GER	80.8	89.7	92.9	97.3	98.37	98.53
NER	55.8	62.6	63.6	58.7	60.11	64.24



Enrolment in Kindergarten has risen by 4% in 2010/11. The growth in enrolment has declined in recent years from a high of 14% in 2007/8.

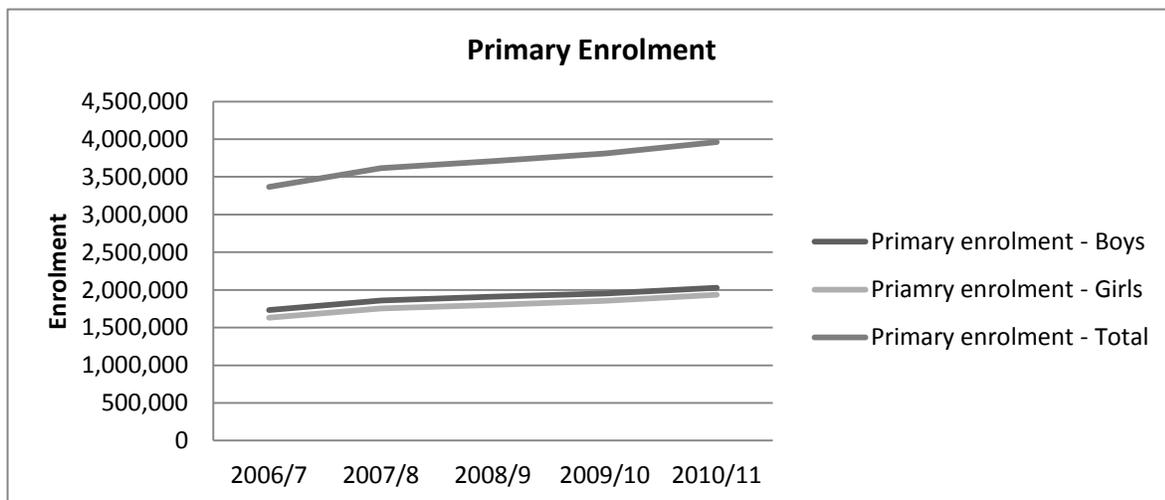


The rise in KG enrolment has kept pace with population growth, as the GER has continued to increase, albeit at a slower pace. The GER currently stands at 98.4 and in order to reach the target of 100% by 2015 this will require a year on year enrolment growth of just 0.32 percentage points. This appears feasible considering the growth rates observed in the past five years, although history shows that a linear growth rate for enrolment rates as they reach universal access is unlikely, as it is the most marginalized children which remain outside education and for whom it is typically much more difficult to design policies to include. The enrolment of children of the appropriate age had also been increasingly steadily, before dipping by five percentage points to 58.7 in 2009/10, but the NER increased to 60.11 in 2010/11.

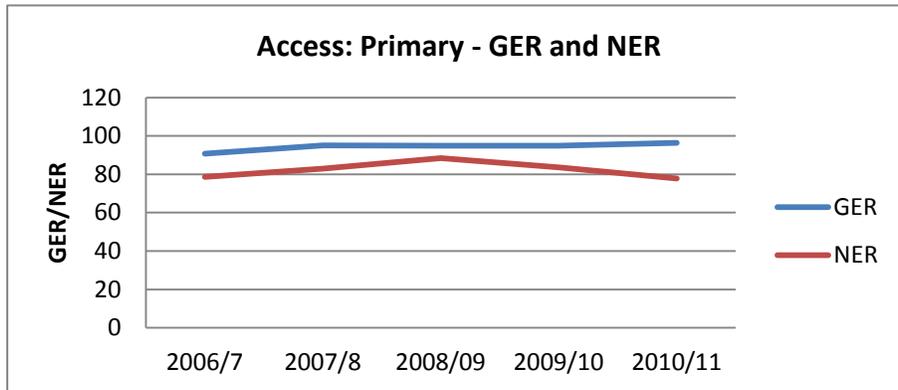
The deprived districts report higher GER and NER than the national enrollment rates, which is encouraging as they still lag behind at the subsequent levels of basic education.

PRIMARY SCHOOL: ACCESS

Primary School – Access	2006/7	2007/8	2008/09	2009/10	2010/11	Deprived
Primary enrolment - Boys	1,732,162	1,860,289	1,908,232	1,953,359	2,028,893	
Primary enrolment - Girls	1,633,600	1,755,734	1,802,415	1,855,899	1,933,886	
Primary enrolment - Total	3,365,762	3,616,023	3,710,647	3,809,258	3,962,779	
GER	90.8	95	94.9	94.9	96.4	92.9
NER	78.6	82.9	88.5	83.6	77.9	77.7
GAR	106	107.1	102.9	101.3	99.6	100.5
NAR	69.3	73.9	72.1	71.1	71.0	72.8
Completion Rate		85.5	86.3	87.1	91.6	86.9
Transition rate to JHS	100.8	96.8		94.6	92.4	82.9



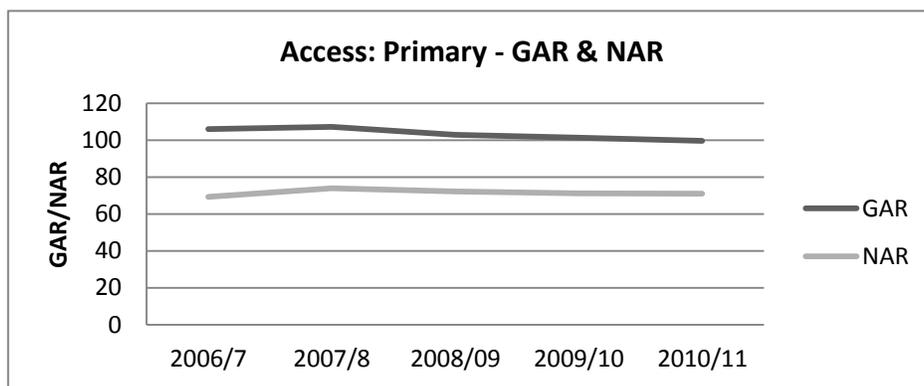
Primary enrollment has continued to rise in the last five years and the increase in enrollment has grown at a higher rate in 2010/11 (4%) than for the preceding two years (3%). However, as is evident from the graph above there has been a slow down from the initial growth rate (7%).



The increase in the pace of enrolment growth in 2010/11 has meant that the rise in enrolment has outstripped population growth, leading to a 1.5 percentage point increase in GER to reach 96.4 after a period of stagnation. The change over the last four years (1.4 percentage points) is however not sufficient to satisfy the medium term targets for GER, which require that it should reach 100%+ by 2012/2013.

Despite the recent progress in GER, NER has exhibited a decreasing trend since 2008/9 and currently stand at 77.85. In light of the recent negative trend in NER, Ghana is not on course to meet the target of a NER of 90 by 2015. Indeed, the NER is now lower than at the beginning of the period under consideration. The expanded access in correct age pupils achieved during between 2007/8 and 2008/9 has been erased by the recent decline.

The GER and NER are lower for the deprived districts, though only by 0.2 percentage points for the NER.

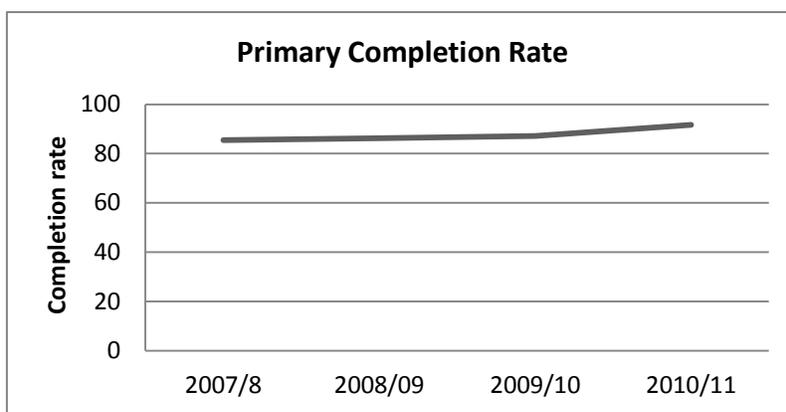


Despite an increase in admission to P1 (0.6%), the rise was not sufficient to keep pace with the population growth leading to the continued decline in the GAR, which currently stands at 99.6. The decrease in GAR may reflect that the policies designed to increase access initially led to an up swell in new registrations of older out of school children. With time from the introduction of such policies (e.g.

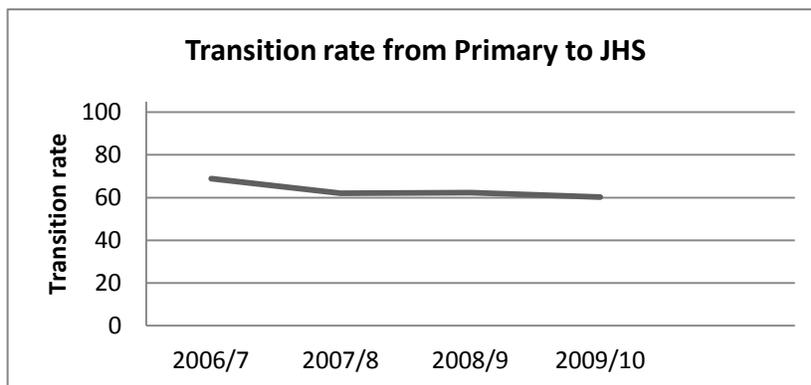
Capitation Grant), the pool of these initially out of school older children will decrease and result in a decline in the admissions rate.

The proportion of correct aged entrants to P1 has also been declining, though at a lower rate than the GAR, and the NAR stagnated in 2010/11. There is therefore some convergence across the two. The decrease in the NAR is however more troubling as this reflects the fact that the proportion of correct aged children enrolling in primary school is decreasing. To ensure that the goal of achieving universal basic education is credible will require that the proportion of children entering the lower stages of education at the correct age must improve.

In contrast to the GER and NER, the GAR and NAR are in fact higher in the deprived districts. This is an encouraging trend.



Primary completion rates have witnessed a positive trend since 2007/08 and reached 91.6 in 2010/11, surpassing the AESOP target of 91.4 by 2010/11. This means that Ghana is currently on track to reach the target of universal primary completion by 2015. The declining admission rates outlined above may risk derailing this progress and thus warrants close attention. The completion rate is almost 5 percentage points lower in the deprived districts.

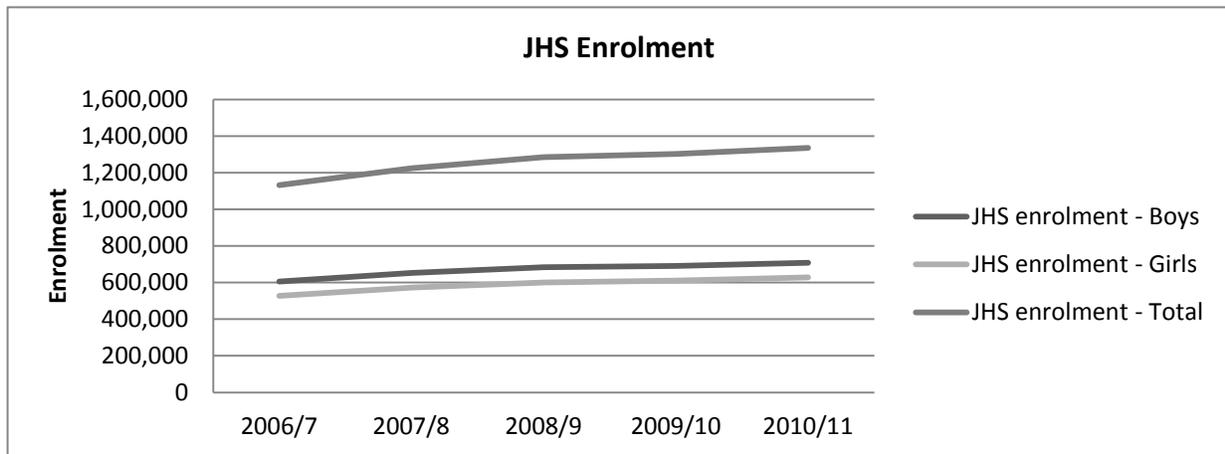


The increase in the Primary completion rate provides an expanded pool of students to progress into JHS. The admissions rate to JHS is however undermined by a decreasing transition rate from Primary to JHS. The transition rate has fallen from just over 100 in 2006/7 to 92.4 in 2010/11. It is unclear whether JHS

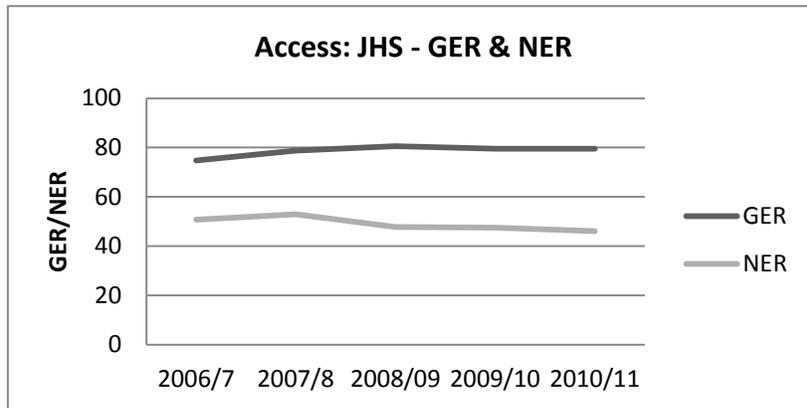
provision has been able to keep pace with the increase in primary completers or whether the decreased transition rate is due to falling demand for JHS. This trend is however of concern if universal basic education is to be achieved. The transition rate is almost 10 percentage points lower for deprived districts.

JHS: ACCESS

	2006/7	2007/8	2008/09	2009/10	2010/11	Deprived
JHS enrolment - Boys	605,086	652,146	684,113	690,664	707,847	
JHS enrolment - Girls	527,232	571,864	601,164	611,276	627,553	
JHS enrolment - Total	1,132,318	1,224,010	1,285,277	1,301,940	1,335,400	
GER	74.8	78.8	80.6	79.5	79.6	70.9
NER	50.7	52.9	47.8	47.5	46.1	39.2
GAR	81.5	84.5	84.6	86.6	86.3	77.3
NAR	44.4	44.5	43.6	43.8	43.9	36.7
Completion rate		67.7	75	66	66.9	57.0
Transition rate to SHS	47.14	44.92	47.24	48.91	57.3	

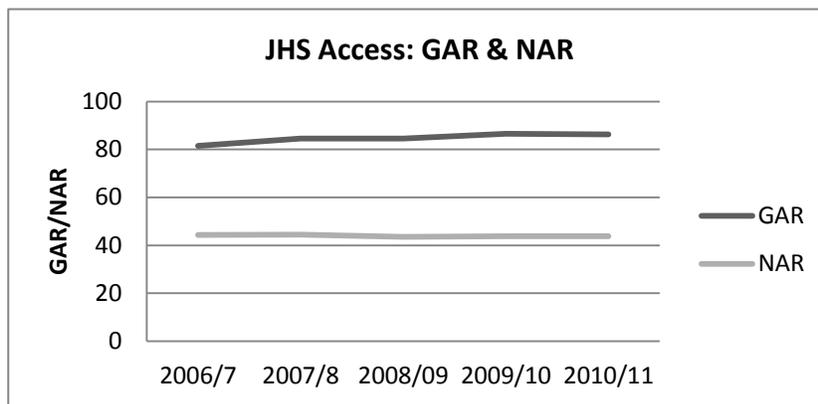


Enrolment in JHS has risen over the past five years and the growth rate has recently increased from a low of 1% in 2009/10 to 3% in 2010/11, though growth rates were higher at the outset of the five year period under consideration.



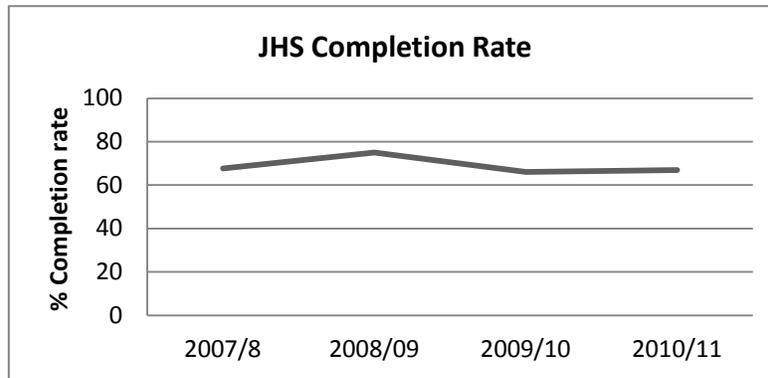
The increased rate of growth in JHS enrolment observed in 2010/11 has halted the recent decline in GER. GER increased by 0.1 percentage points in 2010/11 to reach 79.6, which remains significantly below the 2015 target of 90. Based on historical trends it therefore seems unlikely that Ghana will achieve the 2.08 percentage point annual increase required to reach this target.

The NER has displayed more worrying trends, declining since 2007/8 and now standing at 46.1. The decline in NER for JHS preceded the decline observed in the NER at the primary level in recent years, but the declining rate at the Primary level will exacerbate the problem at the JHS level. The gap between GER and NER is thus widening for JHS. The GER is 9 percentage points lower in the deprived districts at 70.9, whilst the NER at 39.2 is 7 percentage points lower.

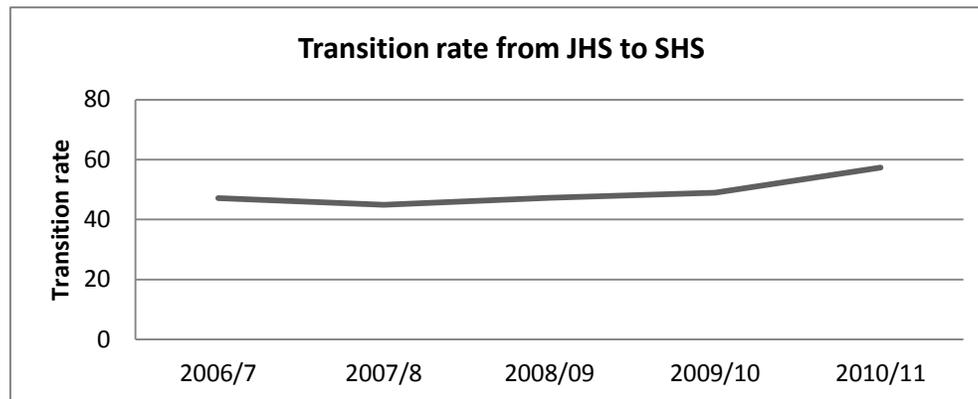


The GAR for JHS currently stands at 86.3, there has been a small decrease since 2009/10 of 0.3 percentage points, but previous to this GAR had been increasing at a low rate. The decrease in the GAR conflicts with the increasing completion rates observed at the Primary level, however the transition rate from Primary to JHS have decreased by 9 percentage points over the past five years. The cohort of pupils due to complete JHS in 2015/16, when the deadline for universal completion is set will begin JHS1 next academic year. The low rate of growth in the GAR supports the conclusion that the target of universal basic education by 2015 is outside Ghana's reach.

The NAR in JHS has experienced little change over the five year period, fluctuating between 44 and 45.



The completion rate for JHS suffered a significant decrease in 2009/10 after having reached a peak of 75 in 2008/9. A positive trend has reemerged in 2010/11 but was not large enough to redress the initial fall from 2008/9. The completion rate is far short of the 100 target that is required to achieve universal basic education by 2015 and Ghana does not appear likely to reach this target based on historical trends in JHS and current completion rates for primary which will feed into JHS. In deprived districts the completion rate is 13 percentage points lower at 57.0. This disparity in deprived districts is higher for the completion rate (GER for JHS3) than for the GAR (GER for JHS1) at 9 percentage points. This suggests that the gap in access between the deprived and non deprived districts increases over the course of JHS.



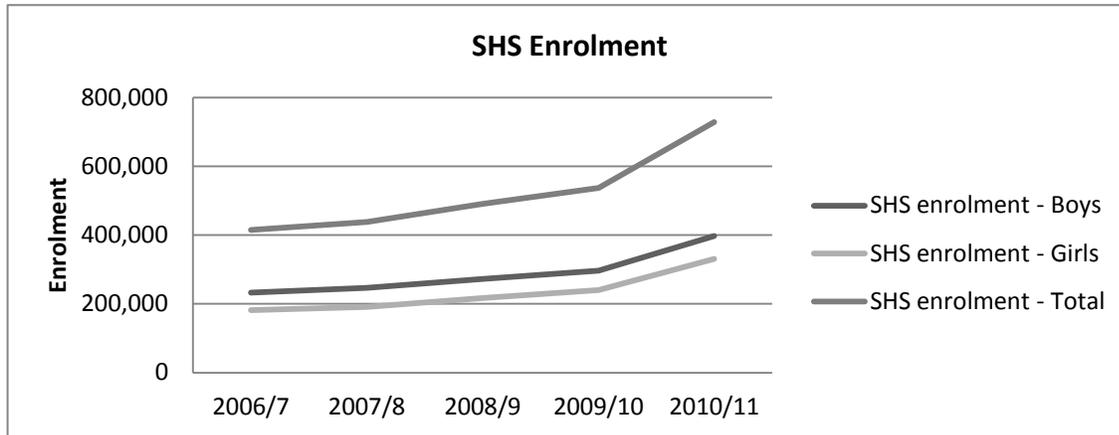
After an initial, decline the transition rate to SHS has been increasing since 2007/8, with an increase of 8 percentage points in 2010/11.

SECOND CYCLE

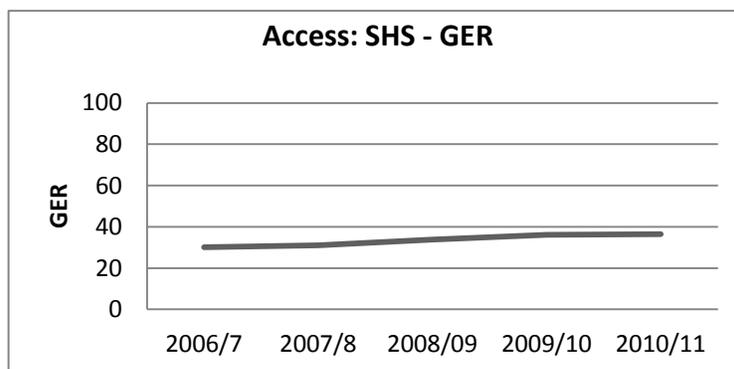
SHS: ACCESS

SHS: Access	2006/7	2007/8	2008/09	2009/10	2010/11
SHS enrolment - Boys	232,777	246,646	272,906	296,954	397,199
SHS enrolment - Girls	181,714	191,125	217,428	240,378	330,877
SHS enrolment - Total	414,491	437,771	490,334	537,332	728,076

GER	30.2	31	33.9	36.1	36.45
NER					24.39
Completion rate	29.36			32.9	32.9



In contrast to basic education, growth in enrolment for SHS has been increasing in recent years, as the expansion in access to basic education feeds into SHS. The sharp rise in 2010/11 is however due to the fact that this is the first year in which there are four grades within SHS meaning that comparisons are not possible in raw enrolment.

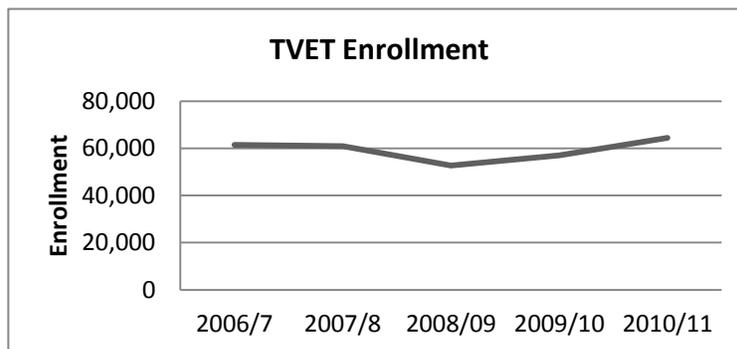


Growth in enrolment in SHS has kept pace with population growth, as the GER has continued to increase reaching 36.5. In order to reach the target of 40%+ within the next two years the GER must grow by more than 1.75 percentage points per year over the next two years. This will however not be achieved if the slowdown in the growth rate of GER continues.

The completion rate has increased over the five year period but stagnated in 2010/11 at 32.9

TVET: ACCESS

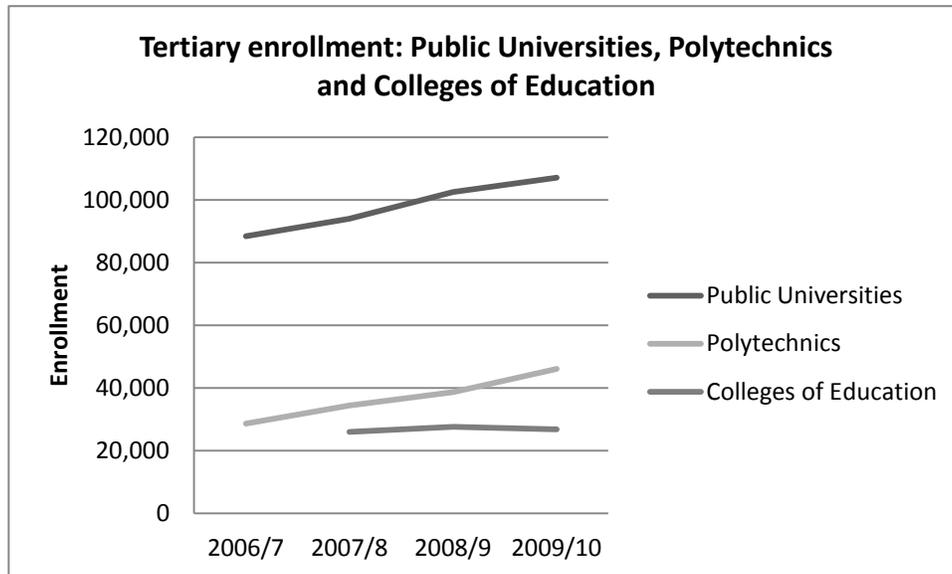
TVET: Access	2006/7	2007/8	2008/09	2009/10	2010/11
Enrollment	61,403	60,898	52,661	56,965	64,478



Following four years of decline in enrollment in TVET, there was a significant increase in 2010/11 with an increase to 64,478 pupils. The most recent increase has compensated fully for the decline in the previous four years and enrollment currently stands above the level at the outset of the period.

TERTIARY: ACCESS

Tertiary: Access	2006/7	2007/8	2008/9	2009/10	2010/11
Public Universities	88,445	93,973	102,548	107,058	
Polytechnics	28,695	34,448	38,656	46,079	
Colleges of Education		26,025	27,589	26,861	
Total	117,140	128,421	168,793	179,998	
Proportion of enrollment in Public Universities					



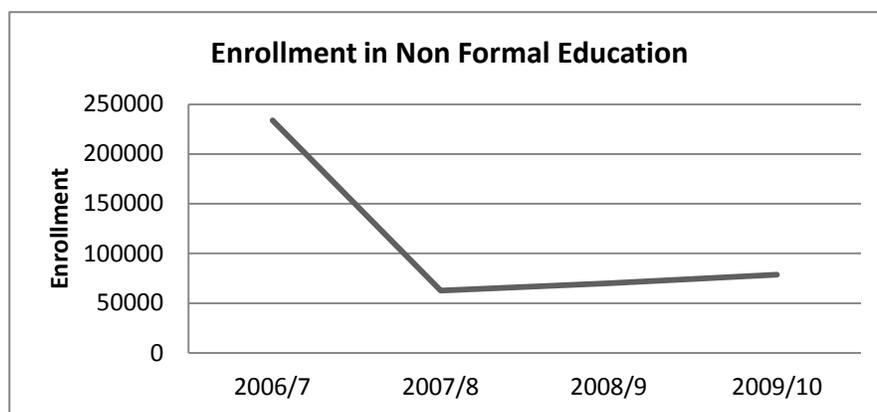
Enrollment in Public Universities and Polytechnics has been increasing since 2006/7 and currently stands at 179,998 students¹. Enrollment growth at the Public Universities has slowed in the year to 2009/10 whilst the rate of growth in enrollment in Polytechnics increased. Enrollment in the Colleges of Education has fluctuated within 26,000 and 28,000 students.

NON FORMAL EDUCATION

	2006/7	2007/8	2008/9	2009/10	2010/11
Adult literacy rate					
Enrollment	233,868	62,553	70,039	78,811	

Enrollment in Non Formal Education fell sharply in 2007/8 after World Bank Project funding ended and NFED was mainstreamed in the GoG. Since the World Bank Project ended enrollment has been expanding at a rate of between 12% and 13% annually. The enrollment data for 2010/11 is currently not available, however if the target enrollment of 20,000 male pupils and 30,000 female pupils is met the overall enrollment for 2010/11 will have increased by 14% from 2009/10. Due to budget constraints the non formal education has not collected data regarding retention or completion rates for their programmes. As a result, the above enrollment rates are based on an absence of any dropouts in the second year of the 21 month programme cycle. It is to be expected that these enrollment rates are thus an upper bound estimate. It is of vital import that the division begins collecting data on such basic features of the programme as retention and completion to enable an accurate measurement of performance.

¹ Tertiary sector data for 2010/11 is not available from NCTE yet, the most recent year is thus 2009/10.



Policy Objective 2: Bridge gender gap in access to education

A vital component of Ghana’s education strategy is to ensure that female and male pupils are able to share equally in the expanded access to education. Research has however shown that girls potentially face additional hurdles in accessing and remaining within education, particularly in later grades as daughters assume additional burdens within the home and are more susceptible to harassment from male pupils and teachers.

Ghana is committed to reaching gender parity within the basic education sector. The ESP includes the target that 50% of pupils in each of the three levels of basic education shall be female by 2015.

EQUITY	<i>Target (2015)</i>			
<i>Indicators</i>	<i>KG</i>	<i>Primary</i>	<i>JHS</i>	<i>SHS</i>
% Female	50%	50%	50%	50%

MAIN FINDINGS

Basic Education

Despite the significant progress made to date in gender equity for access within Basic Education in Ghana, there has been relatively limited progress in recent years.

Kindergarten

GPI is highest at the lower levels of education as expected, with Kindergarten closest to achieving gender parity. GPI has been fluctuating around parity and currently stands at 0.98. The same pattern emerges for NER when disaggregated by gender, where the parity index has fluctuated around the current rate of 0.99.

Primary

At the Primary level GPI had stagnated at 0.96 since 2006/7 before increasing to 0.97 in 2010/11. This indicates a positive trend in the enrolment of out of school female pupils compared with male pupils. Despite the falls in NER and GAR observed in 2010/11, the parity index for both rates has remained constant at 0.97. The recent stagnation in NAR occurred in both genders, leading to stagnation in the parity index at 0.97.

JHS

The GPI climbed to 0.93 in 2010/11 after a period of stagnation at 0.92. Gender disparity in the GAR has also narrowed over the past five years as the GAR falls more sharply for male pupils than female pupils. Disaggregation of NER and NAR for JHS revealed surprising trends in the indicators and as a result for the level of gender disparity observed. Rather than co-trending as the other disaggregated enrollment rates in basic education have, these rates have experienced divergent growth trends, with the male and female rates often moving in opposite directions. Parity in NER was achieved in 2008/9 but the gender gap quickly reemerged although it narrowed in 2010/11 as fall in NER affected male pupils whilst the female NER stagnated. The NAR has fluctuated between 44 and 45 over the past 5 years, masking the divergent trends in correct age admissions by gender, with the disaggregated rates moving in opposite directions every year from 2006/7 to 2010/11. Parity rates for NAR increased significantly over the period, from 0.76 at the outset of the period to 0.94 in 2010/11. The male NAR has fallen over the period, whilst the female NAR has increased.

The disparity in the completion rate is narrowing for both Primary and JHS. It is a significant achievement that as the primary completion rate has grown in line with targets, the relative improvement for female pupils has been greater.

The parity index for all enrollment and admission rates is lower for the deprived districts at the basic level with the exception of the NAR for JHS.

The limited progress in GPI in recent years at the basic education level suggest that if parity is to be achieved a concerted and targeted strategy is required to close the remaining gap in access levels. Disaggregating the GPI at the district level reveals that there is substantial variation at each level of basic education. To close the gap in national indicators it will be necessary to focus attention on these areas. For Kindergarten 15% of districts possess a GPI below 0.95 and of the nine districts with a GPI below 0.90, six lie in the Northern region. At Primary level, 13% of districts have a GPI below 0.9, whilst eight of the bottom ten districts lie in the Northern region. The GPI for JHS in 7% of districts lies below 0.75, falling to 0.62 in Nkwanta North (Volta Region). Again, the northern region is over represented in this poor performing group, with six of the bottom ten districts lying in the Northern region.

Second cycle

GPI for SHS is lower than at Basic Education but has been increasing steadily over the five year period and currently stands at 0.87. Percentage female enrollment in TVET has fluctuated over the period, having reached 50% in 2008/9, but female share of enrollment has since fallen to 45%.

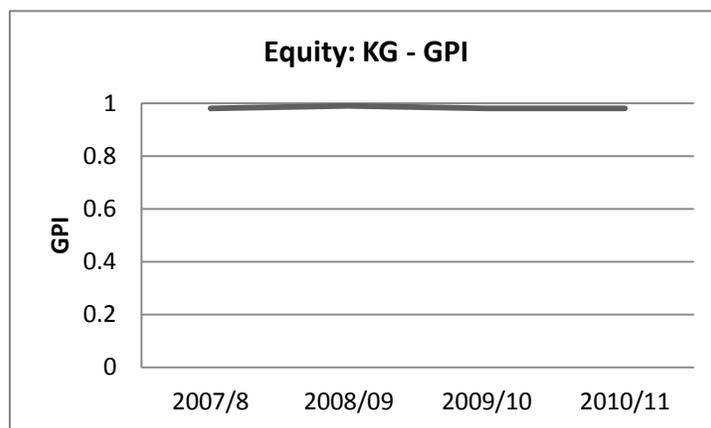
Issues arising:

- GPI is near parity for Kindergarten but declines with progress through basic education and is much lower at SHS. The focus of gender policies should thus focus on increasing retention through the education system. Improvements in gender parity in Basic Education have however been limited in recent years. To close the final gap will require a more concerted and targeted approach. Scaling up gender interventions such as girls scholarships, girls clubs and take home food rations are potential policy options.

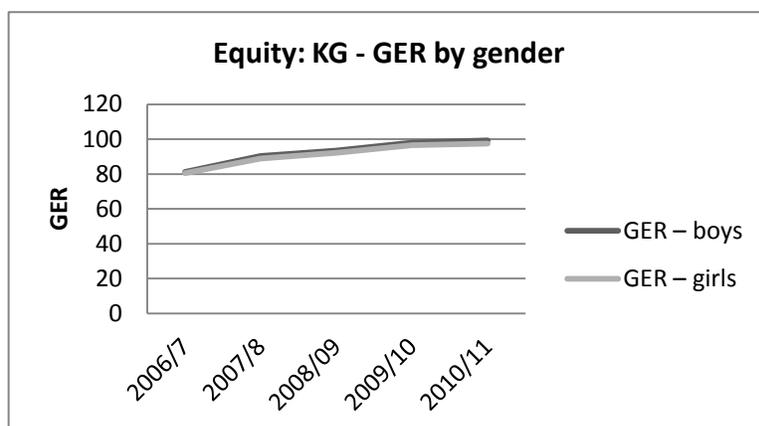
BASIC

Kindergarten

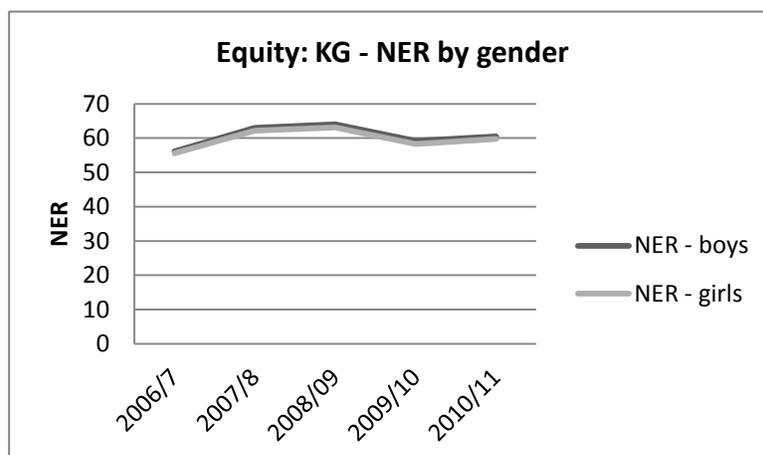
	2006/7	2007/8	2008/09	2009/10	2010/11	Deprived
% Female enrolment	49.9	49.7	49.8	49.8	49.7	
GPI	0.99	0.98	0.99	0.98	0.98	0.97
GER – boys	81.2	90.4	93.5	98.1	99.3	100.0
GER – girls	80.5	88.9	92.2	96.5	97.5	97.1
NER – boys	56.1	63.0	64.0	59.2	60.5	65.2
NER – girls	55.6	62.2	63.1	58.3	59.7	63.3



GPI has fluctuated around parity for Kindergarten since 2007, lying between 0.98 and 0.99. This is reflected in the GER broken down by gender which have co-trended closely over the last five years. The recent stagnation in GPI means that it is not clear whether complete parity will be secured in the short to medium term in line with targets.



When NER is broken down by gender it reveals that despite both increasing and decreasing trends in the NER at the national level, the gender disparity in correct age enrollment has remained broadly constant, with a temporary decrease in 2009/10.

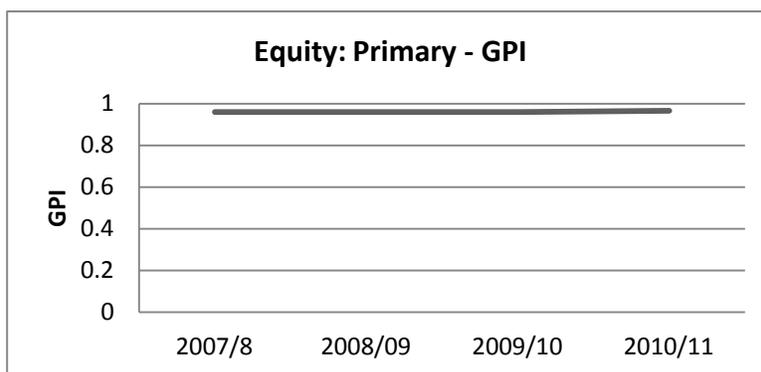


	2006/7	2007/8	2008/09	2009/10	2010/11
NER gender disparity index	0.99	0.99	0.99	0.98	0.99

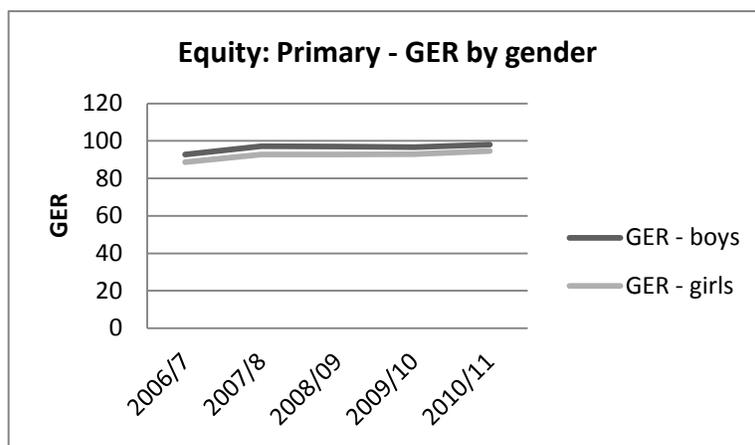
Primary School

	2006/7	2007/8	2008/09	2009/10	2010/11	Deprived
% Female enrolment	48.5	48.6	48.6	48.7	48.8	
GPI	0.96	0.96	0.96	0.96	0.97	0.95
Completion Rate - boys		88.7	89.3	89.7	94.14	89.57
Completion rate - girls		82.3	83.2	84.3	89.04	83.83
GER - boys	92.8	97.1	97	96.7	98.04	95.36
GER - girls	88.7	92.8	92.8	93	94.66	90.25
NER - boys	79.8	84.2	89.6	84.9	78.98	79.54

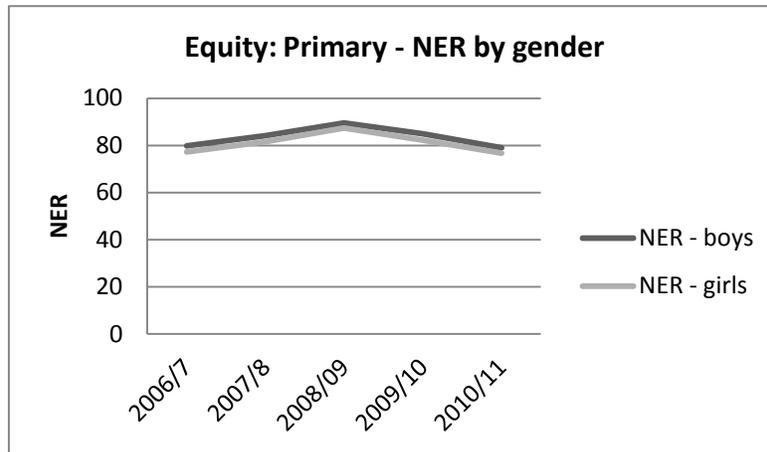
NER - girls	77.3	81.6	87.4	82.3	76.7	75.80
GAR - boys	107.3	108.6	104.7	102.9	101.23	103.15
GAR - girls	104.6	105.6	101.1	99.8	97.9	97.88
NAR - boys	70.1	74.7	72.7	72.1	72.06	74.58
NAR - girls	68.6	73.1	71.5	70	69.86	70.95



In 2010/11 the GPI for primary education increased by 0.01 percentage points to reach 0.97, after three years stagnation at 0.96. This narrowing of the gender gap was brought about by the recent increase in GER, which when disaggregated by gender reveals that the increase was greater amongst girls.

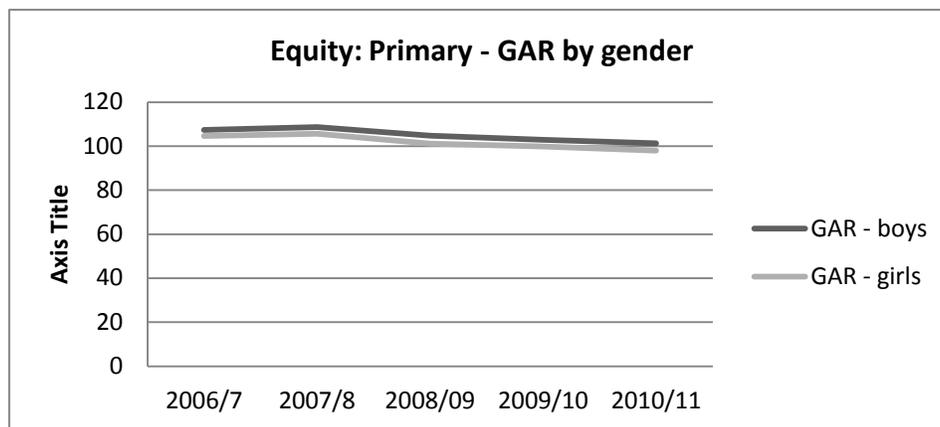


Progress in gender equity for the NER since 2006/7 has been limited. Despite the periods of both increasing and decreasing trends in NER, when it is disaggregated by gender it is clear that the disparity has remained broadly unchanged.



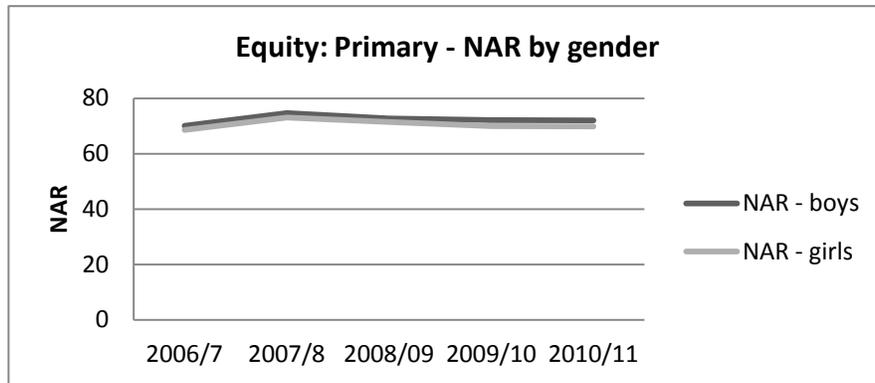
Primary	2006/7	2007/8	2008/09	2009/10	2010/11
NER gender disparity index	0.97	0.97	0.98	0.97	0.97

The GAR disaggregated by gender for primary reveals that both rates have been falling at an equal pace, preserving the initial rate of parity.



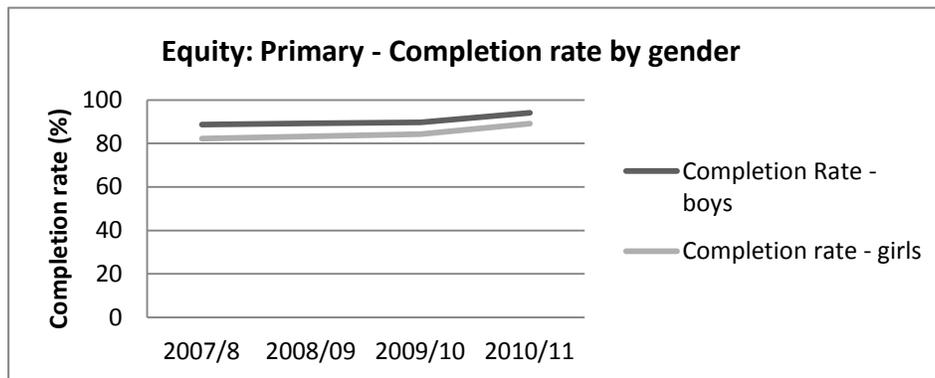
	2006/7	2007/8	2008/09	2009/10	2010/11
GAR gender disparity index	0.97	0.97	0.97	0.97	0.97

The stagnation in NAR observed in 2010/11 applied equally to both genders leading to no change in the parity index from the previous year.



	2006/7	2007/8	2008/09	2009/10	2010/11
NAR gender disparity index	0.98	0.98	0.98	0.97	0.97

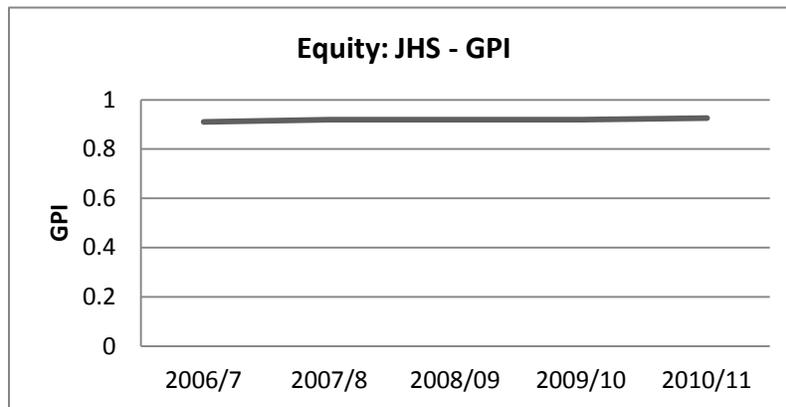
The recent rapid growth in the completion rate, which has ensured that the medium term AESOP target has been met for 2010/11, has not come at the cost of female participation. The female completion rate has been increasing at a faster pace than the male rate, leading to a narrowing of the gender divide. This is a significant development in paving the way for equitable access. The disparity is greater than for the GAR, which measures the GER in P1 rather than P6 as the completion rate does, indicating that relative enrolment for female pupils is lower at higher levels of education.



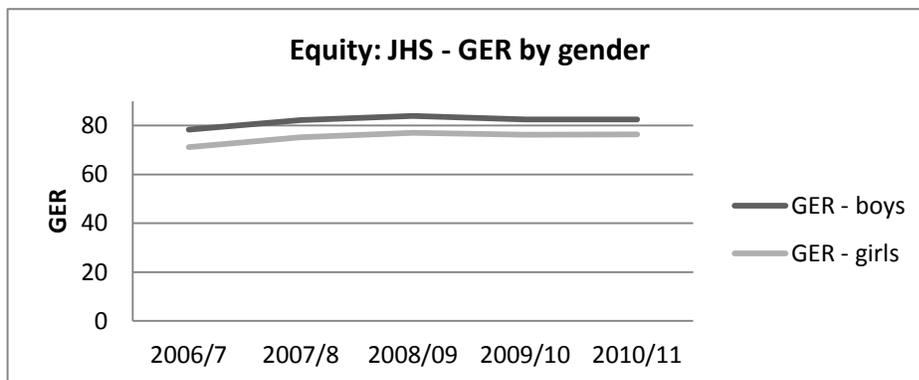
JHS

JHS: Gender	2006/7	2007/8	2008/09	2009/10	2010/11	Deprived
% Female enrolment	46.6	46.7	46.8	47.0	47.0	
GPI	0.91	0.92	0.92	0.92	0.93	0.92
Completion Rate - boys		72.3	79.7	70.1	70.9	60.8
Completion rate - girls		62.8	70.1	61.8	62.8	52.4
GER - boys	78.3	82.2	83.9	82.5	82.6	73.6
GER - girls	71.2	75.2	77.0	76.3	76.4	67.8

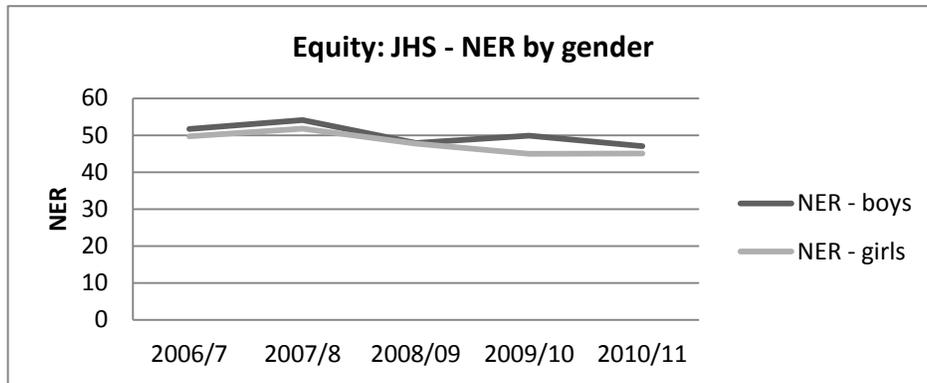
NER - boys	51.7	54.1	47.9	49.9	47.0	40.0
NER - girls	49.7	51.8	47.7	45.0	45.0	38.2
GAR - boys	84.2	87.2	87.3	88.9	88.5	79.4
GAR - girls	78.7	81.7	81.7	84.2	83.9	74.8
NAR - boys	50.3	51.0	44.0	45.6	45.2	37.1
NAR - girls	38.3	37.6	43.3	41.9	42.5	36.2



The GPI for JHS currently stands at 0.93, a small increase from the stagnant rate of 0.92 observed since 2007/8. The GER rate has moved during this period, but the relative disparity has been constant, before a small narrowing in 2010/11, as evidenced in the graph below.

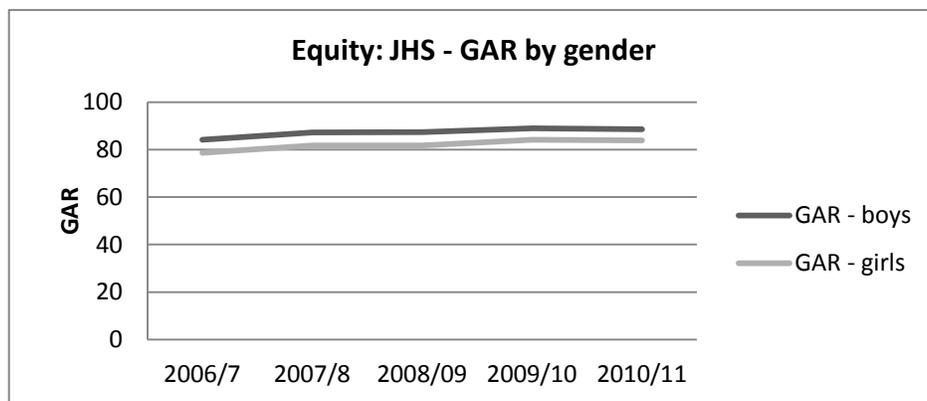


Unlike the GER, where the rates disaggregated by gender have been broadly co-trending, the NER has experienced changes in gender disparity as the disaggregated NER has moved in opposite directions in recent years. Parity in the enrollment rates was reached in 2008/09 but the disparity resurfaced in 2009/10, as male NER rose, but female NER continued to decline. In 2010/11 however the disparity reduced as the female NER increased whilst the male NER fell. Over the last few years both rates have fallen but disparity remains at the same level as in 2006/7.



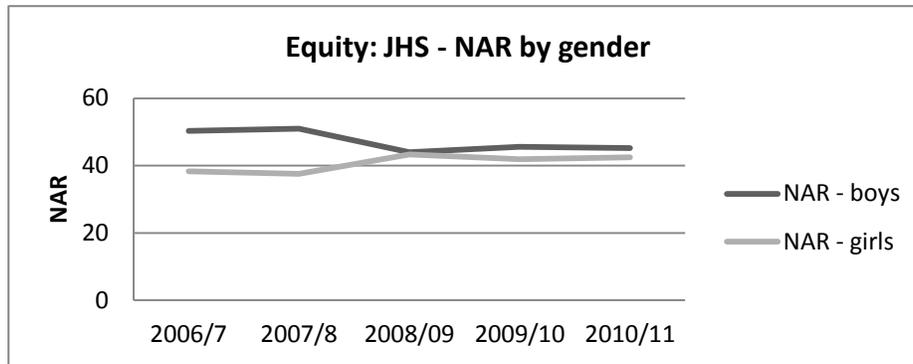
	2006/7	2007/8	2008/09	2009/10	2010/11
NER gender disparity index	0.96	0.96	1.00	0.90	0.96

Whilst the GAR has been increasing between 2006/7 and 2009/10, the disparity has been closing, although it has recently stagnated at 0.95.



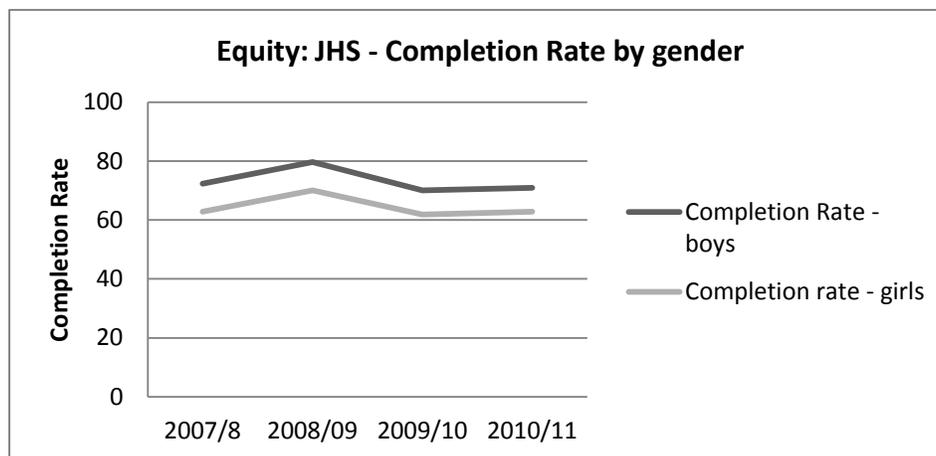
	2006/7	2007/8	2008/09	2009/10	2010/11
GAR gender disparity index	0.93	0.94	0.94	0.95	0.95

Gender differences in NAR for JHS have varied widely in response to the contrasting trends observed in the disaggregated admissions rates. Huge advances in gender parity occurred in 2008/9 as the admission rate for boys fell whilst it increased for girls. Gender parity subsequently decreased as the female NAR fell whilst the male rate increased, before increasing as the trends in NAR reversed. It is startling that the NER consistently moves in opposite directions for female and male pupils, suggesting that there is some potential trade off between male and female correct age enrolment.



	2006/7	2007/8	2008/09	2009/10	2010/11
NAR gender disparity index	0.76	0.74	0.98	0.92	0.94

Finally, the parity index for the completion rate has increased slightly from 0.87 to 0.89. Despite positive and negative growth trends, the completion rate for both genders has increased over the past five years, though to a greater extent for female pupils, closing the gender gap slightly.

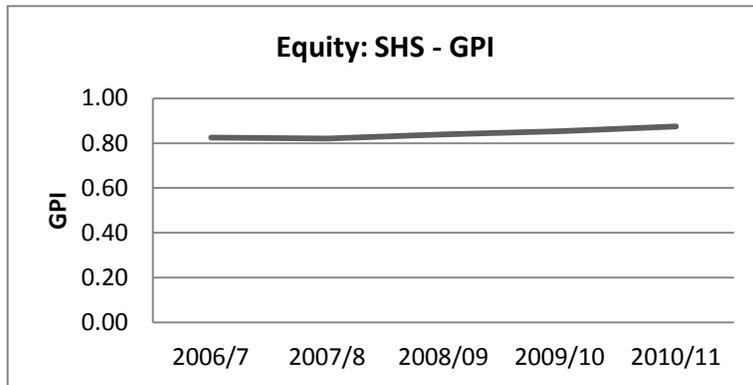


	2007/8	2008/09	2009/10	2010/11
Completion rate gender disparity index	0.87	0.88	0.88	0.89

SECOND CYCLE

SHS

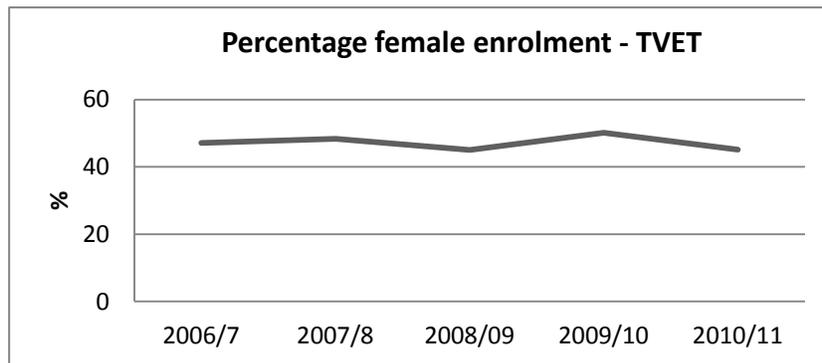
SHS: Gender	2006/7	2007/8	2008/09	2009/10	2010/11
% Female enrolment	43.8	43.7	44.3	44.7	45.4
GPI	0.82	0.82	0.84	0.85	0.87
Completion rate - B	31.9			35.8	34.6
Completion rate - G	26.7			29.8	31.1



The GPI has been increasing in line with the growth in GER observed in SHS. The increase in enrollments overall has been accompanied by a larger proportion of female pupils relative to male. The GPI for SHS is one of the targets in the MDDBS framework. The target for 2010 was 0.87, which was achieved this year

TVET

TVET: Gender	2006/7	2007/8	2008/09	2009/10	2010/11
% female enrollment	47.1	48.3	45	50.1	45.1



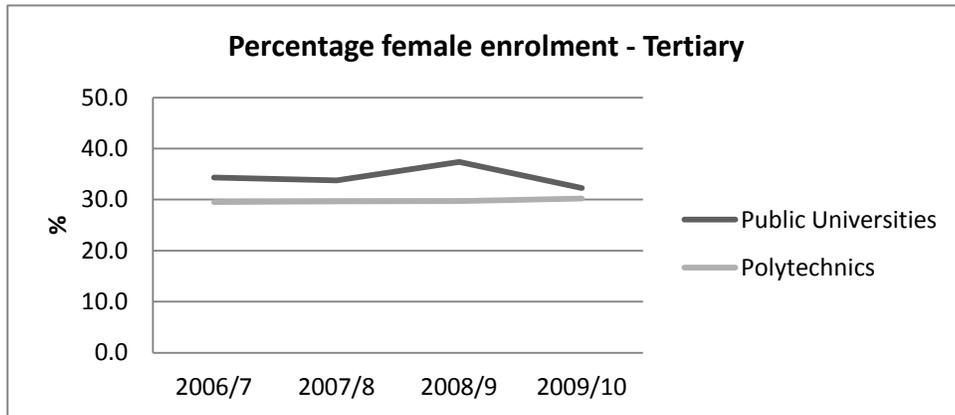
The percentage of female pupils enrolled in TVET has fluctuated over the five year period under consideration and after 50% enrollment was achieved in 2009/10 this figure has subsequently fallen by five percentage points.

Tertiary

Percentage female enroll.	2006/7	2007/8	2008/9	2009/10
Public Universities	34.3	33.7	37.4	32.3
Polytechnics	29.5	29.6	29.7	30.2

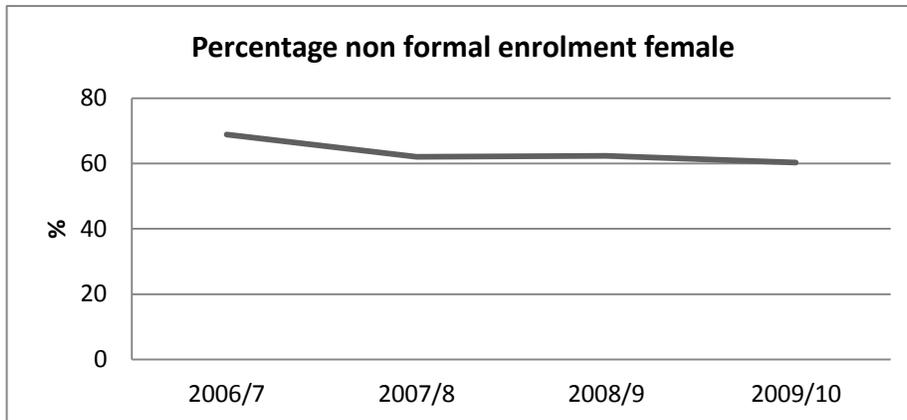
Female enrolment at Public Universities has fluctuated over the past five years, but reduced by 2 percentage points over the entire period, currently standing at 32.2%. The proportion of female

students in Polytechnics has increased over the period, though by less than one percentage point. The goal of 50% female enrolment appears a distant goal based on current growth trends in this indicator. In both tertiary sub-sectors, female students currently make up less than one third of enrolment.



Non formal education

Non-formal: gender	2006/7	2007/8	2008/9	2009/10
% female	68.82	62.1	62.3	60.2



The percentage of non formal learners that are female has fallen consistently over the period, though females still make up the majority of learners at 60.2% in 2009/10. NFED's target for the most recent batch is 60% female enrolment.

Policy Objective 3: Improve access to quality education for people with disability

Disabled pupils face additional barriers to accessing education and it is estimated that a large proportion of out of school children possess a disability. Special Needs Schools and Special Units (located within mainstream schools) provide specialized support for pupils with severe disabilities, but these educational facilities are few in number and unable to incorporate all pupils with disabilities within Ghana. This has led to the adoption of a policy to include all non severe disabled pupils in mainstream schools by 2015. The lack of information about the prevalence and extent of disability within Ghana mean that this is a difficult policy outcome to measure. Thus the indicators only consider the number of disabled pupils within mainstream and special schooling to assess coverage.

FINDINGS: DISABILITY

Basic

Data for enrolment of disabled children within mainstream Basic Education reveals a puzzling trend, with a sharp decline in 2007/8 which saw enrolment broadly halve at all levels of Basic Education. Such an extensive decline within one academic year seems unlikely, especially when contrasted with the trends in enrollment for 2008/9 to 2010/11, which are much more muted. Discussions with EMIS staff suggested that there may be a data discrepancy due to the inclusion of enrollment of special schools in the earlier data. However, the total enrolment in Special Schools in 2006/7 comprises only about one third of the decline observed in 2007/8, suggesting that this cannot be the sole source of the discrepancy. This data issue will be investigated further and updated in the final report, but the subsequent analysis will focus on the period 2007/8 onwards.

Due to the limited provision of specialist education in Special Schools and Units, the majority of disabled pupils enrolled in formal education are attending mainstream schools, with 17,416 disabled pupils enrolled in mainstream Basic Education. Enrolment of disabled pupils in mainstream primary schools has experienced a sustained decline over the last four years. Enrolment fell by 11% in 2010/11 and has fallen by 18% since 2007/8. Access for disabled pupils in KG and JHS has fluctuated in recent years. The enrolment of disabled pupils in KG fell by 9% in 2010/11; effectively erasing the growth in enrolment observed over the previous two years and is now at the same level as four years ago. Access to JHS for disabled pupils has recently expanded with a 17% surge in enrolment in 2010/11, contributing to a growth of 8% over the entire period. Despite the recent positive trends for enrolment in JHS, the declining enrolment trends at the Primary level may constrain enrolment growth in JHS in the future.

Second cycle

Enrolment of disabled pupils in SHS has experienced a sustained downwards trend since 2007/8. There appear to be inconsistencies in the 2010/11 data which reveal a 90% decline in enrolment despite no class graduating between this year's data collection and the 2009/10 census, due to the move to a four year programme. A dropout rate of 90% of disabled pupils within one year in SHS seems unfeasible. This warrants further investigation and has been brought to the attention of EMIS.

Special Schools

Accessing data from the Special Education division within GES has proved difficult this year despite providing substantial notice and persistent chasing. Thus the data for enrolment in Special Schools is not reported for 2010/11. Enrolment in Special Schools had however been growing at between 8 and 10% annually between 2006/7 and 2009/10.

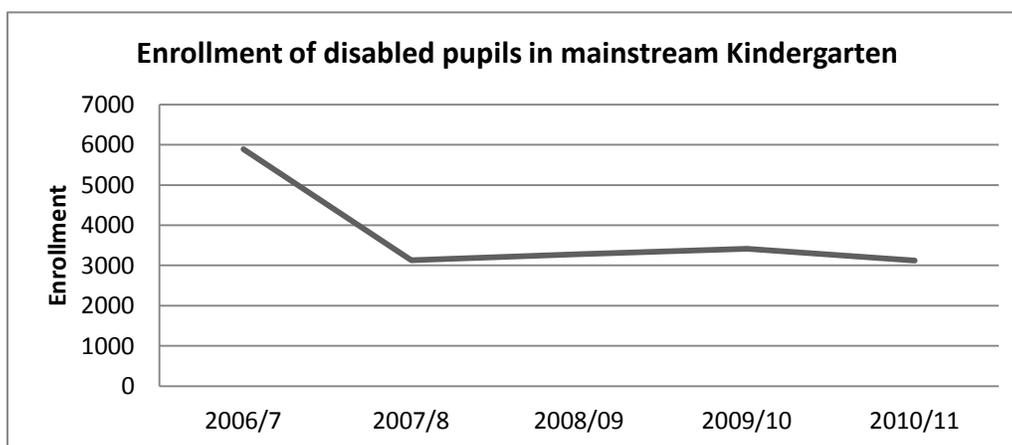
Issues arising

- The policy direction is clear, that children with non severe disabilities should be mainstreamed. There is however only limited evidence of expanding access for disabled pupils within mainstream education. Enrolment has increased in JHS in recent years, but stagnated in Kindergarten and declined for Primary and SHS.
- There is limited support for teachers and schools in including the disabled pupils within the mainstream school framework. Increasing the focus placed on these pupils may increase capacity for schools to effectively include the pupils and raise demand as pupils are able to fully realize the gains from education.
- Though access to special schools is steadily increasing, provision remains low compared with the size of Ghana's school population.

BASIC

KINDERGARTEN: DISABILITY

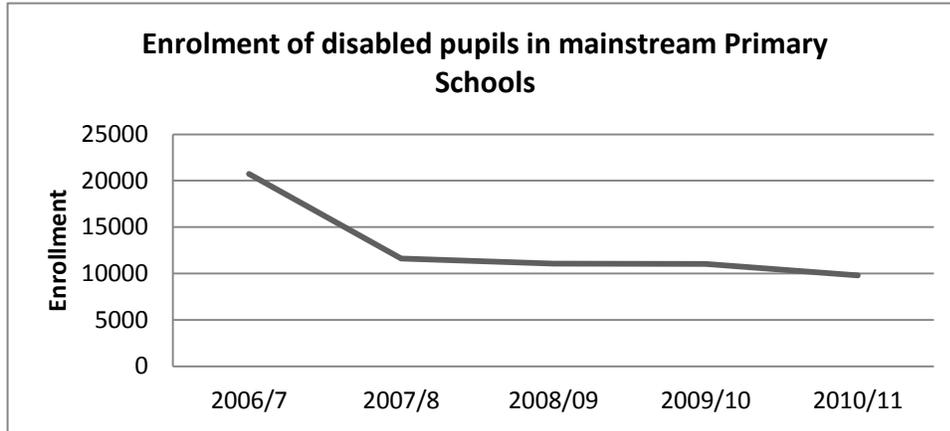
Kindergarten: Disabled Pupils	2006/7	2007/8	2008/09	2009/10	2010/11
Enrolment of disabled pupils in mainstream KG	5886	3129	3284	3413	3123



The number of disabled pupils in KG has fluctuated since 2007/8 although enrolment in 2010/11 is broadly equivalent to the level in 2007/8. The growth in enrolment between 2007/8 (4-5% per annum) has been offset by the 8% decline in 2010/11.

PRIMARY: DISABILITY

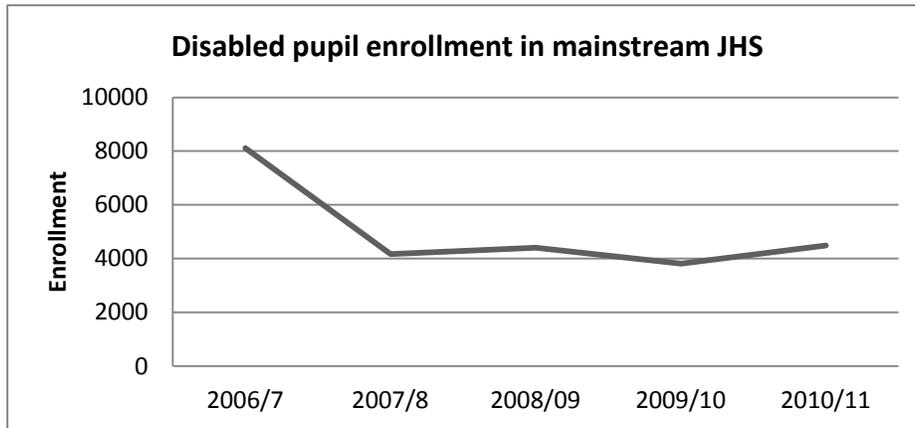
	2006/7	2007/8	2008/09	2009/10	2010/11
Enrolment of disabled pupils in mainstream Primary	20730	11613	11081	11035	9804



The number of disabled pupils enrolled within Primary has decreased consistently over the last four years, falling by 16% over the entire period.

JHS: DISABILITY

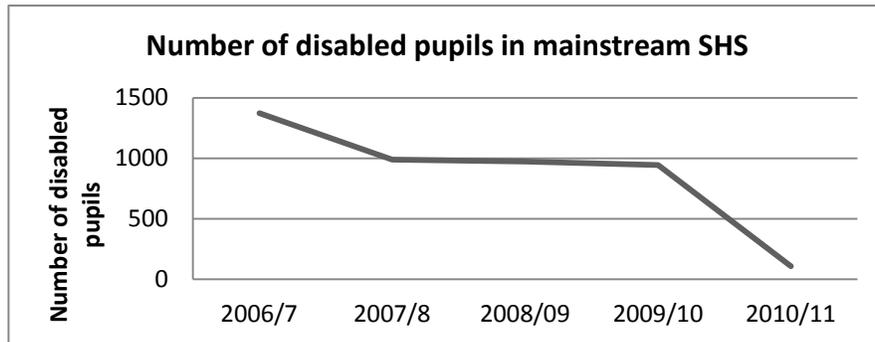
	2006/7	2007/8	2008/09	2009/10	2010/11
Enrolment of disabled pupils in mainstream JHS	8113	4172	4399	3814	4489



Enrolment of disabled pupils in JHS has fluctuated over the last four years, though increased by 8% overall. Most recently enrolment increased by 17% in 2010/11. Declining enrolment in Primary presents a potential threat to continued growth in JHS.

SHS: DISABILITY

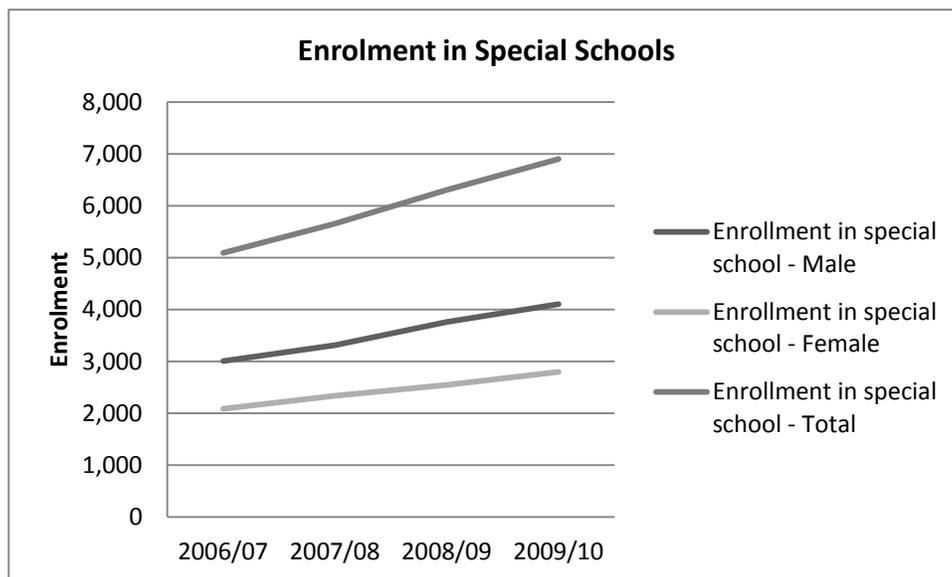
	2006/7	2007/8	2008/09	2009/10	2010/11
Enrolment of disabled pupils in mainstream SHS	1373	989	974	944	108



Enrolment of disabled pupils in mainstream SHS has experienced a sustained decline since 2006/7. The 90% decline in enrolment witnessed in 2010/11 however raises concerns about the reliability of the data. There was no graduation between the data collection in 2009/10 and the 2010/11 census as SHS expanded to 4 years, meaning that if anything enrolment would be expected to increase. A 90% drop out rate of disabled pupils warrants further investigation.

Special Education

	2006/07	2007/08	2008/09	2009/10	2010/11
Enrollment in Special Schools - Male	3,004	3,315	3,760	4,101	
Enrollment in Special Schools - Female	2,088	2,339	2,548	2,799	
Enrollment in Special Schools - Total	5,092	5,654	6,308	6,900	



Enrolment in special education has been increasing a rate of between 8 and 10% since 2006/7 to reach 6,900 pupils in 2009/10. Despite this increase the capacity of specialized education in Ghana remains low compared with the school population.

Policy Objective 4: Mainstream issues of population, family life, gender, health, HIV / AIDS/ STI, conflicts, fire and road safety, civic responsibility, Human rights and environment in the curricular at all levels

This is a broad policy objective and one for which there is only limited data collected at present. The two indicators included in this section address the teaching of HIV/AIDS awareness and prevention.

MAIN FINDINGS

The proportion of public schools incorporating HIV/AIDS in the curriculum has fallen in the last year at all levels of basic education following persistent growth in preceding years. In 2009/10 over 90% of all basic schools taught HIV/AIDS issues as part of their curriculum, yet this figure has fallen by 15 percentage points in Primary and Kindergarten, whilst JHS fell by 10 percentage points. The coverage of these issues in schools within the deprived districts is lower at all levels of basic education.

HIV/AIDS coverage at SHS has previously been much lower than at the Basic level; however the recent fall observed at Basic has led to convergence as the proportion of SHS incorporating HIV/AIDS issues stagnated at 76%. Inclusion of HIV/AIDS issues in the TVET curriculum is less than half that observed in basic education and SHS, at 35% of institutions. Coverage has been recently decreasing from a high of 52% in 2008/9.

Issues arising

- The recent decrease in the percentage of schools incorporating HIV/AIDS issues at all levels of basic education is a troubling trend. This issue requires attention to identify the potential causes

BASIC

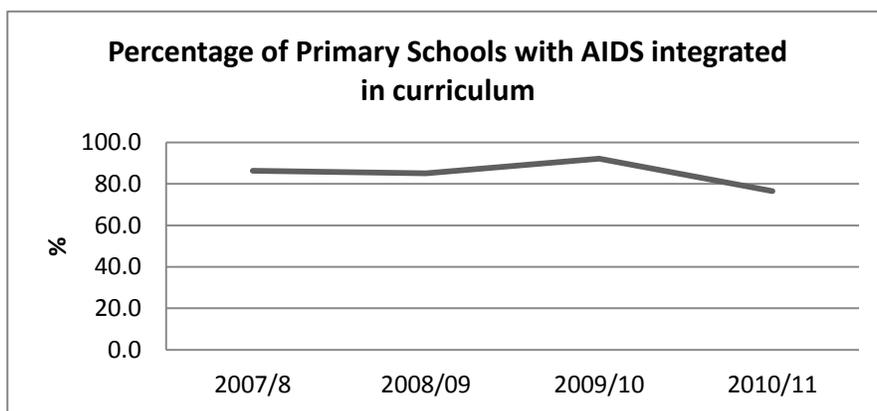
KINDERGARTEN: MAINSTREAM HEALTH ISSUES

KG: Mainstream health issues	2006/7	2007/8	2008/09	2009/10	2010/11	Deprived
% Schools with HIV/AIDS integrated in curriculum		84.3	83.6	90.0	74.4	72.14
% of schools with HIV Alert status						

HIV/AIDS issues had gained increasing coverage in Kindergarten from 2007/8, but suffered a sudden decline in 2010/11, as the number of schools incorporating these issues in their curriculum fell by 15 percentage points. Less than three quarters of schools currently incorporate this important area in their curriculum.

PRIMARY

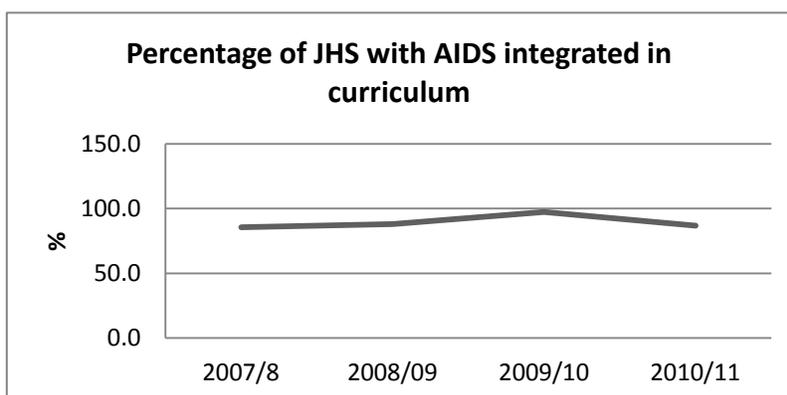
Primary: Mainstream Health issues	2006/7	2007/8	2008/09	2009/10	2010/11	Deprived
% Schools with HIV/AIDS integrated in curriculum		86.3	85.0	92.1	76.5	72.0
% of schools with HIV Alert status						



The decline in HIV/AIDS coverage in Primary schools is in line with that observed in Kindergarten. After sustained increase, the coverage suddenly fell in 2010/11 by 15 percentage points.

JHS

JHS: Mainstream Health issues	2006/7	2007/8	2008/09	2009/10	2010/11	Deprived
% Schools with HIV/AIDS integrated in curriculum		85.5	88.1	97.3	86.7	80.0
% of schools with HIV Alert status						

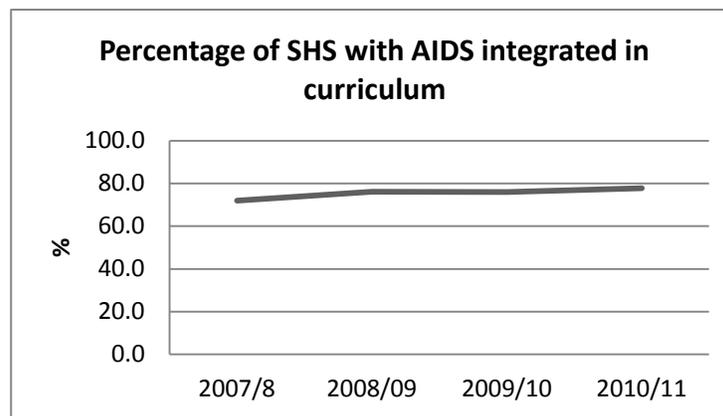


The percentage of schools incorporating HIV/AIDS in the curriculum for JHS has fallen by ten percentage points in 2010/11, reversing the previous positive growth trend in this indicator.

SECOND CYCLE

SHS

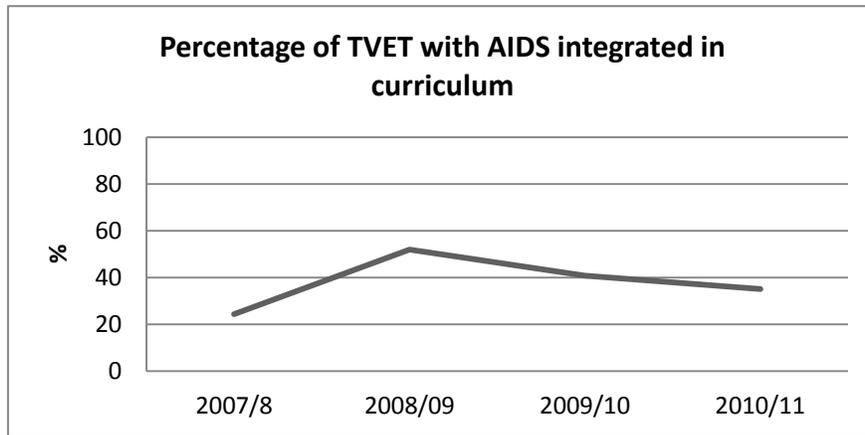
SHS: Mainstream Health issues	2006/7	2007/8	2008/09	2009/10	2010/11
% Schools with HIV/AIDS integrated in curriculum		72.0	76.1	76.0	77.7
% of schools with HIV Alert status					



Coverage of HIV/AIDS issues was much lower in SHS schools at the outset of the period. The proportion of schools incorporating HIV/AIDS issues has however not experienced the recent decline observed in basic education leading to convergence in coverage levels with Primary and Kindergarten.

TVET: MAINSTREAM HEALTH ISSUES

TVET: Mainstream Health issues	2006/7	2007/8	2008/09	2009/10	2010/11
% Schools with AIDS integrated in curriculum		24.43	52	40.77	35.04
% of schools with HIV Alert status					



Coverage of HIV/AIDS issues in TVET is currently less than half the rate for Basic Education and SHS. The proportion of schools incorporating HIV/AIDS issues peaked in 2008/9 at 52% before declining to 35% in 2010/11.

THEMATIC AREA: EDUCATIONAL

The Educational thematic area focuses on issues relating to quality and skills development. Quality is measured by a number of indicators related to the provision of educational inputs and where available, direct measures of educational outcomes. Relevance of education is also considered in relation to the promotion of science and technical subjects within the Ghanaian education sector.

Educational: Policy Objectives
5. <i>Improve quality of teaching and learning</i>
6. <i>Promote Science and technical education at all levels.</i>

Policy Objective 5: Improve quality of teaching and learning

After the initial success in expanding access to basic education in Ghana, attention has increasingly been placed on the issue of quality of education. International assessments reveal that Ghanaian pupils underperform compared with international benchmarks and that many children are failing to gain the intended benefits of education.

The quality indicators included in the ESP are outlined below:

QUALITY	Target (2015)			
Indicators	KG	Primary	JHS	SHS
% Trained teachers	95%	95%	95%	95%
PTR (pupils/teacher)	25	35	25	22
Transition to next level	100%	100%	60%	

The AESOP (2010-13) also includes medium term targets for the percentage of trained teachers:

AESOP MEDIUM TERM TARGETS				
% trained teachers				
	2011-actual	2011 – target	2012 - target	2013 – target
KG	39%	53%	64%	74%
Primary	63%	70%	76%	83%
JHS	78%	80%	84%	88%

MAIN FINDINGS

BASIC

Teachers

Kindergarten

The total number of teachers in Kindergarten has decreased by 8% in 2010/11 after a sustained period of growth in the teacher workforce. The 17% decrease in untrained teachers could not be offset by the 11% rise in trained teachers. The overall decline in teachers combined with the growth in enrolment has raised the PTR to 37, which is now 12 above the target for the sector. Due to the delayed deployment of NYEP staff it is unclear to what extent this decline is due to the omission of this component of the untrained teacher workforce.

The number of trained teachers in Kindergarten has increased by 11% in 2010/11, outstripping the increase in enrolment, leading to a decrease in the PTTR of 9 pupils per trained teacher to reach 96. The national rates in PTTR however mask major allocation issues for trained teachers within Ghana, with significant disparities in PTTR uncovered at the district level. Whilst the top ten districts possess a PTTR below 34, the bottom ten districts all have PTTRs above 550. Trained teachers are effectively absent from the lowest districts, which report PTTRs between 1,000 and 3,272. Allocation of trained teachers to the deprived districts remains substantially below the national rate with a PTTR of 209.

The percentage of trained teachers at KG has been rising steadily since 2007/8 but increased significantly in 2010/11 by 6 percentage points to reach 25%. This does not reflect the reality in the classrooms however as the omission of NYEP staff will inflate the proportion of trained teachers. There has however been strong growth in trained teachers within KG in 2010/11.

Primary

The total number of teachers at the Primary level has decreased by 6% in 2010/11. Although the number of trained teachers increased by 1% this was offset by the 17% decrease in untrained teachers in 2010/11. This led to an increase in the PTR from 31 to 34, which remains below the 2015 target of 35. The omission of NYEP teachers in the census for 2010/11 however means that teacher prevalence in classrooms will be higher. Although the increase in PTR is in line with 2015 targets, the national rates continue to mask significant disparities in teacher allocation. Decomposing PTR to the district level reveals that the ten districts with the lowest PTRs are below 25, yet the bottom ten all possess PTRs of more than 50, substantially above the national target. The disparity in teacher allocation is reflected in the PTRs for the deprived districts, which are 18% higher for primary.

The 1% increase in trained teachers at the Primary level in 2010/11 was not sufficient to keep up with growth in enrolment leading to an increase in PTTR from 53 to 54. At primary level the top ten districts have a PTTR of less than 32 pupils per trained teacher (below the target PTR), whilst all bottom ten districts have a PTTR of more than 139, with the poorest performing district, Bia, reporting a PTTR of 413

pupils per trained teacher. The PTTR for deprived districts is 63% above the national rate at 87 pupils per trained teacher.

The percentage of trained teachers at the Primary school level has increased to 63% in 2010/11 after four years of decline. Although 2010/11 witnessed an increase in trained teachers, the increase in the proportion of trained teachers has been buoyed by the omission of NYEP staff.

JHS

The number of JHS teachers has declined by 11% in 2010/11. In contrast to Kindergarten and Primary, the number of trained teachers as well as untrained teachers has fallen. After a period of sustained growth in trained teachers 2010/11 saw a 5% decrease alongside a 30% decrease in untrained teachers. The PTR rose from 15 to 17, which is still substantially below the PTR target of 25. The omission of NYEP staff however means that the actual prevalence of teachers in schools is even higher. The variation in PTR at the district level is lower for JHS than Kindergarten or Primary. The top ten districts have PTRs below 12, whilst the bottom ten report PTRs above 27.

The number of trained teachers in JHS decreased by 5% in 2010/11 causing an increase in PTTR from 20 to 22. Despite this increase the PTTR remains below the target PTR for the sector of 25, indicating that there is an excess of trained teachers in JHS based on this target ratio which seeks to maximize the efficient use of resources. The district level breakdown of PTTRs however reveals that the allocation of teachers mean that in many schools the ratio is considerably higher. Although the PTTR for the top ten districts are all below 15, the bottom ten districts have PTTRs above 45, with a maximum of 70 in Bia district. Deprived districts continue to be underserved by trained teachers with a PTTR 38% higher at 30.

The percentage of trained teachers has increased by 5% in 2010. Rather than reflecting the expansion in the trained teacher cohort at all levels, this observed increase has been buoyed by the sharp decrease in untrained teachers in 2010/11 (16% decline in KG, 17% in Primary and 30% decline in JHS) due in large part to the late deployment of NYEP, which meant that they were not included in the census. Indeed the increase in the percentage of trained teachers at the JHS level is due to a smaller decrease in trained teachers (5%) than untrained teachers (30%) rather than an expansion of the trained teacher cohort. In light of the issues with NYEP, the PTTR presents a more accurate picture of trained teacher access in Ghana, with rates increasing for both Primary and JHS.

Textbooks

Core textbook to pupil ratios at all levels of education reveal significant and sustained decreases since 2006/7, highlighting the cyclical nature of textbook allocation in the sector. The core textbook ratio at Primary has halved since 2006/7, falling from 2.0 per pupil to 1.0 per pupil in 2010/11. At JHS the decrease has been even greater, from an initial ratio of 2.7 textbooks per pupil, the current ratio is less than one textbook per pupil at 0.9. After large procurements, follow up investments are not undertaken during the lifecycle of a textbook allocation to ensure that the supply is replenished in light of damages

and loss. The number of textbooks per pupil in the deprived districts is lower for each level of basic education: 11% lower for Kindergarten, 14% for Primary and 5% for JHS.

Infrastructure

Increased enrolments have placed pressure on pupil classroom ratios, which have increased at all levels, suggesting that infrastructure investments have not managed to keep pace with the increase in enrollment. The strong enrolment growth witnessed in Kindergarten has led to the sharpest rise in PCR in basic education, increasing by 11% in 2010/11 to reach 64. PCR at the primary and JHS level have increased by 5% to reach 42 and 39 respectively. In deprived districts the greatest disparity from national PCR was found in Kindergartens, with a PCR 29% higher than the national level. PCR for JHS is 11% higher in deprived districts, compared with 6% for Primary schools.

Pupil Furniture Ratios (PFR) are highest at the lower levels of education, with 2 pupils per seat and 2.2 per desk space in Kindergarten, compared with 1.4 pupils per seat and 1.5 pupils per desk in Primary. The ratio is lowest for JHS with 1.3 pupils per seat and desk space. Furniture provision has kept pace with enrolment growth more effectively, with the PFRs for seating and writing stagnating at Kindergarten and increasing by less than 1% for JHS. At Primary the pupil seating ratio has increased by 1% and the pupil writing desk ratio by 4%. The disparity in Pupil seating and desk ratios in deprived districts is greatest for Kindergarten (35% for both) followed by Primary (16% and 20% respectively) and lowest for JHS (3% for both types of furniture).

Repetition and Promotion Rates

Repetition rates have fallen for all levels of education with the exception of JHS, though even here the rate is low at only 3.8%. This is a reflection of the mass promotion policy. Interestingly repetition rates are lower for deprived districts at all levels of basic education. As the promotion rates are lower for deprived districts it appears that higher dropout rates outweigh the lower repetition rates.

Promotion rates by grade at the primary level have fluctuated since 2006/7, but the current rates are broadly similar to those at the outset of the period. The only exception is the P1 promotion rate which was lowest at the outset of the period (83.6%) but which has witnessed consistent increases over the period and now stands at 91.5%. This is a significant improvement. The promotion rates for the deprived districts are lower than the national rates, with the current rate for P1 at the 2006/7 national rate.

Promotion rates for JHS have decreased for both JHS1 and JHS2 over the past five years, with 91% of students promoted from JHS1 and 78% of pupils promoted from JHS2. The decrease in promotion rates with progress in JHS is of concern. The deprived districts have lower promotion rates, but the disparity is lower than that observed at the primary level.

Second cycle

SHS

2010/11 is the first year in which there are four rather than three grades in each school following the expansion of SHS to a four year programme. This has increased the pressure on all inputs at SHS level. However, as the government has already announced that the three year programme is to be reintroduced, the observed increases are temporary.

The number of trained SHS teachers increased by 11% and the number of untrained teachers rose by 30%. The increase in the teacher workforce was however not sufficient to keep up with the increase in enrollment arising from the expansion to a four year programme for SHS. At SHS the PTR has therefore increased from 21 to 27 pupils per teacher, which now lies above the target ratio. The PTTR has witnessed a similar increase to 32 pupils per trained teacher after fluctuating between 24 and 26 in the preceding four years.

The percentage of trained teachers has fluctuated around 85-87%, which is below the target of 95%. The target of 95% trained teachers by 2015 is unlikely to be met, however when compared with the proportion of trained teachers at the basic education level, which remain woefully below target, the performance in SHS can be considered strong in this regard.

The number of core textbooks per pupil has fallen dramatically in 2010/11 with the introduction of SHS4 but English and Maths textbooks had been exhibiting a downwards trend in recent years and by 2009/10, before the introduction of SHS4, both had fallen below one textbook per pupil. This reflects the cyclical nature of textbook distribution witnessed in the basic sector.

TVET

The percentage of trained teachers within TVET has increased over the five year period, but peaked in 2008/9 at 69.7. The percentage of teachers with a technical qualification has fluctuated, hitting a high of 88.7 also in 2008/9, but overall the share of technical teachers has only increased by 0.2 percentage points over the five years under consideration.

Issues arising

- Inequitable deployment of teachers is evident in the significant disparities observed in PTR and PTTR at the district level and for deprived districts. This is a long standing problem that is subject to a number of current interventions to increase supply of teachers in the under resourced areas, though problems clearly still remain. Additional approaches for consideration include reforming the District Assembly endorsement of teachers to enhance supply to these areas, rather than enhance the disparity. Increasing the supply of teachers from the under resourced areas, which may require the introduction of quotas or less formally extra support for potential applicants from these areas to raise their grades to admission requirements. Due to the complexity of this problem it could warrant further research into establishing the most important reservations that trainee teachers have for avoiding these areas, and in so doing identify the most effective packages to attract them to these postings.
- Textbook allocations: sustaining the supply of textbooks is crucial to prevent the allocation cycles evident at all levels of education. Potential solutions include undertaking more regular

procurement, as well as considering alternative approaches to textbook provision, such as e-readers.

- An important area in Ghana for which there is currently no national data available is teacher absenteeism and time on task. Discussions have taken place within the Ministry to develop a baseline for teacher absenteeism through the EMIS census and school report card. Increasing supervision and accountability of teachers will be crucial to address this problem. Potential avenues to address this include bottom up approaches, such as training SMCs to function effectively as the oversight mechanism they are designed to be. Top down accountability approaches include empowering District Education Offices to impose sanctions and withhold pay for absent days. This would bring teacher management closer in line with public schools who achieve superior results with significantly fewer trained teachers (PTTR for private primary schools is 231 compared with 54 for public).

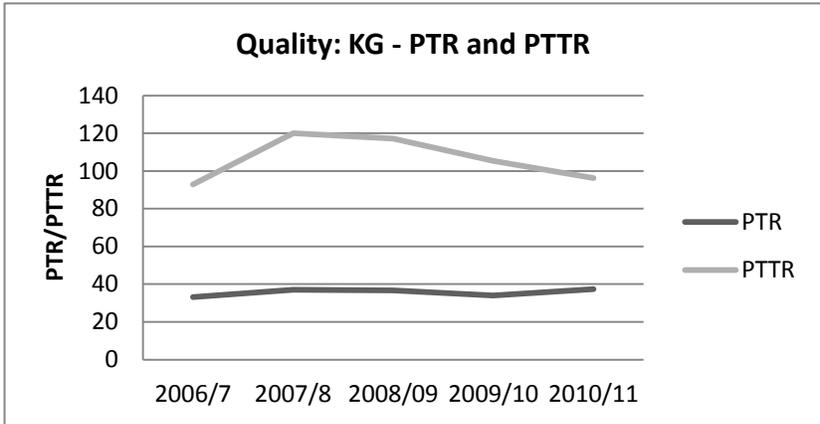
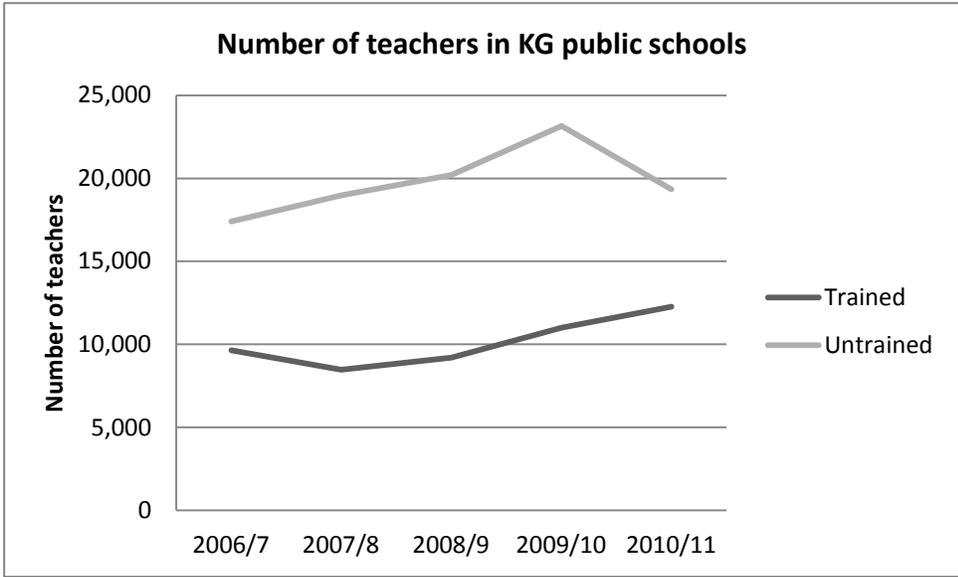
BASIC

Kindergarten

KG currently has no direct measure of educational outcomes and thus quality indicators related to education inputs are reported alongside the repetition rate.

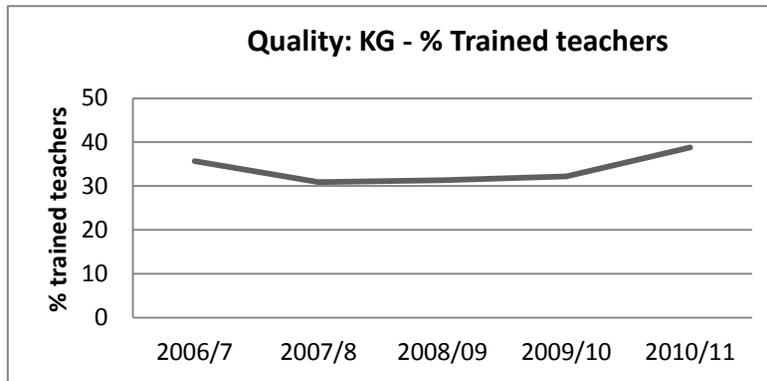
	2006/7	2007/8	2008/09	2009/10	2010/11	Deprived
PTR	33	37	37	34	37	52
PTTR	93	120	117	105	96	206
% Trained teachers	35.7	30.9	31.3	32.2	38.8	25.2
Number trained teachers	9,649	8,466	9,206	10,999	12,260	
Number untrained teachers	17,410	18,971	20,205	23,150	19,335	
Core textbook per pupil	0.0	0.1	0.1	0.2	0.35	0.31
Pupil classroom ratio	51.9	55.5	53.5	57.4	63.7	82.3
Pupil seating ratio	2.1	2.1	2.0	2.0	2.0	2.7
Pupil desk ratio	2.2	2.2	2.1	2.2	2.2	3.0
Repetition rate	4.2	7.3	3.4	3.1	2.9	2.6

The number of trained teachers in KG has been increasing since 2008 and witnessed an 11% increase from 2009/10 to 2010/11. The number of untrained teachers has declined by 17% in 2010/11. It is currently unclear what proportion of this reduction is due to the omission of NYEP staff in the census due to late deployment.

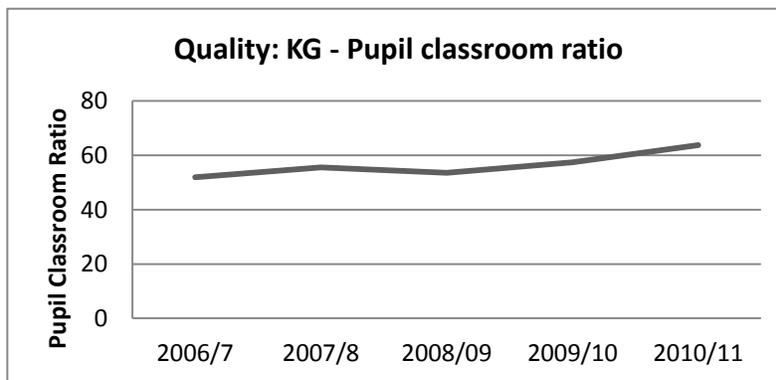


The PTR has fluctuated around the mid 30s and currently stands at 37 pupils per teacher, the recent increase in part due to the omission of NYEP teachers. The PTR is 12 pupils above the target PTR of 25 for 2015. Amongst deprived districts there are more than ten extra pupils per teacher compared with the national rate, with a PTR of 52.

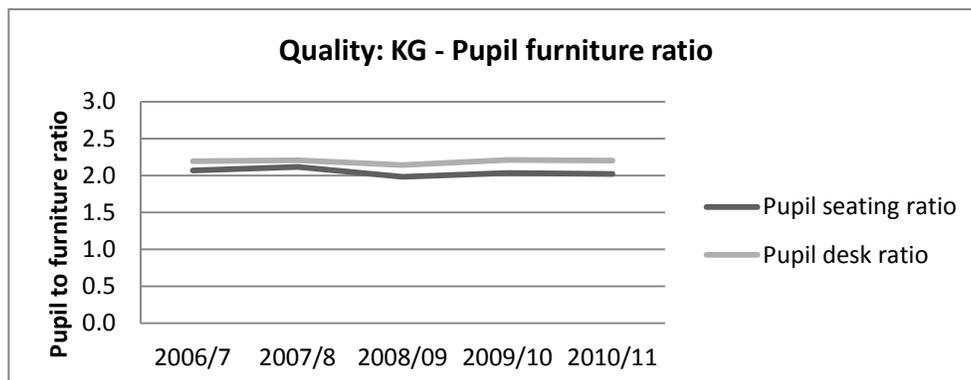
The PTTR is much higher, currently standing at 96 pupils per trained teacher. Since 2007/8 however the PTTR has been decreasing, from a high of 120, as the increase in the number of trained teachers has outpaced enrollment growth. The PTTR amongst deprived districts is however 40% higher, at 206.



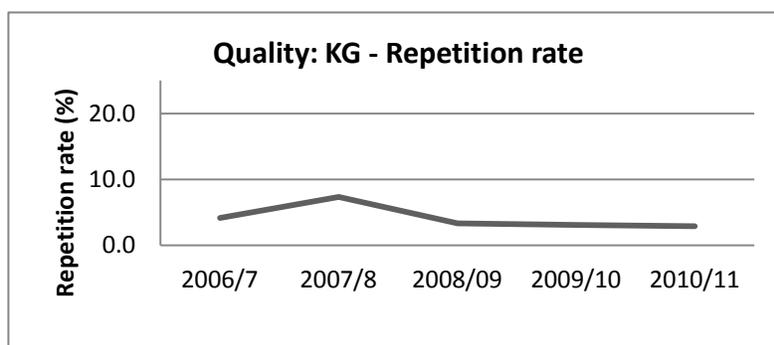
The percentage of trained teachers has increased from 31% in 2007/8 to 39% in 2010/11, this increase is in part due to the increase in trained teachers, but has been inflated by the omission of NYEP teachers in the census. The indicator however still falls short of the AESOP target of 53% by 2010/11. The percentage of trained teachers in deprived districts is more than 10 percentage points lower than the national level, standing at 25.2%. The three teacher indicators reveal that the deprived districts are still underserved in teacher allocation.



The pupil classroom ratio (PCR) in KG is has broadly been increasing since 2006/07, with a decrease in 2008/09, which has since been eclipsed, indicating that the infrastructure developments have struggled to keep pace with the increase in enrollments since KG was officially included in basic education provision within Ghana. Infrastructure provision in deprived districts is lower, with a PCR of 82.3, indicating that there are on average 20 more pupils per classroom in the deprived districts.



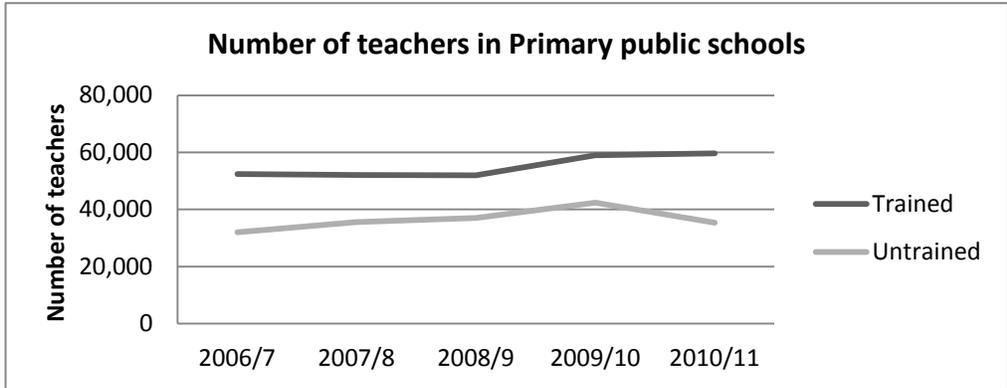
The pupil furniture ratio has been fluctuating around 2 pupils per seating place and 2.2 pupils per writing place since 2006/7 despite the increase in enrollment rates. Furniture provision is weaker for the deprived districts, with 2.7 pupils per seating place and 3 pupils per writing place.



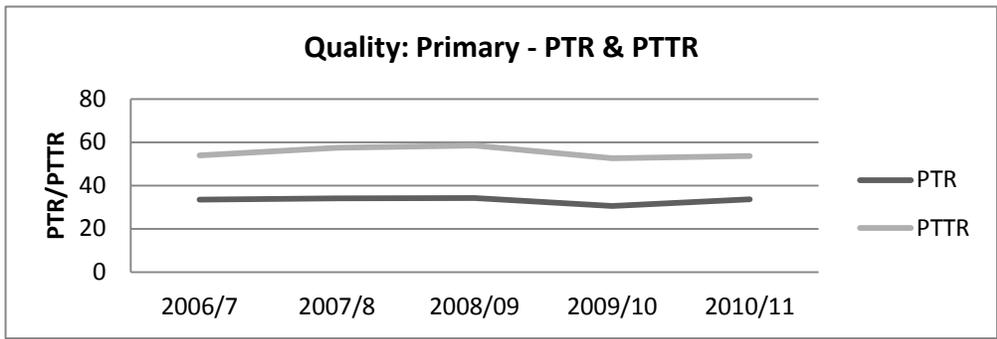
The repetition rate in KG classes has decreased since 2007/8 and currently stands at 2.9% of enrolled pupils.

Primary School

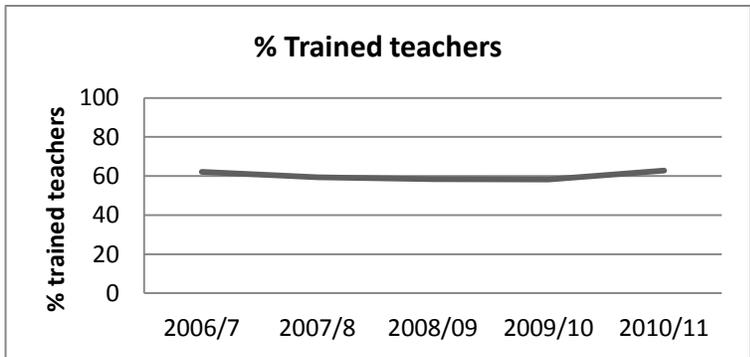
Primary: Quality	2006/7	2007/8	2008/09	2009/10	2010/11	Deprived
PTR	33	34	34	31	34	40
PTTR	54	57	59	53	54	87
% Trained teachers	62.1	59.4	58.4	58.2	62.8	45.7
Core textbook per pupil	2.0	1.7	1.6	1.6	1	0.9
Pupil classroom ratio	39.0	39.8	39.8	40.0	41.93	44.4
Number trained teachers	52,362	52,108	51,995	58,963	59,620	
Number untrained teachers	31,962	35,557	36,999	42,358	35,307	
Pupil seating ratio	1.2	1.3	1.3	1.4	1.42	1.7
Pupil desk ratio	1.3	1.3	1.3	1.4	1.46	1.8
Repetition rate	6.5	7.8	4.2	4.0	2.92	2.8
P6 NEA English min. comp.		69.7		76.9		
P6 NEA English proficiency		26.1		35.6		
P6 NEA Maths min. comp.		46.2		61.9		
P6 NEA Maths proficiency		10.8		13.8		
P3 NEA English min. comp.		50.2		57.6		
P3 NEA English proficiency		15		20		
P3 NEA Maths min. comp.		42.6		61.2		
P3 NEA Maths proficiency		14.6		25.2		
Promotion rate P1	83.6	85.6	n/a	89.7	91.5	83.2
Promotion rate P2	97.8	94.9	n/a	96.0	98.8	92.7
Promotion rate P3	96.5	96.1	n/a	93.5	96.6	91.1
Promotion rate P4	95.1	92.8	n/a	90.4	94.3	87.8
Promotion rate P5	95.7	92.7	n/a	90.7	95.0	89.5



The total number of Primary teachers has decreased by 6% in 2010/11 after a period of sustained growth between 2006/7 and 2009/10. The recent fall was caused by a 17% decrease in the number of untrained teachers which significantly outweighed the 1% increase in trained teachers observed in 2010/11. It is unclear at present what proportion of the decrease in untrained teachers is due to the omission of NYEP staff in the census due to late deployment.

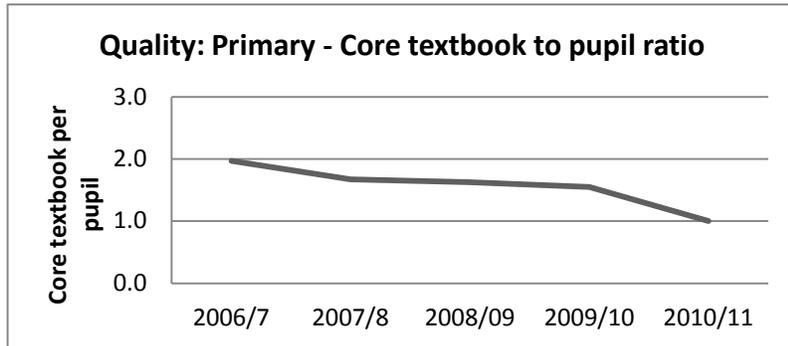


After a recent decline, the PTR for primary schools has climbed to 34 pupils per teacher, which is in line with ESP target of 35 pupils per teacher by 2015. This ratio has most likely been buoyed by the omission of NYEP staff. The PTR for deprived districts lies above the target, at 40 pupils per teacher. The PTTR is significantly higher than the PTR standing at 54 pupils per trained teacher. The deployment of trained teachers in deprived districts is significantly lower, with 87 pupils per trained teacher.

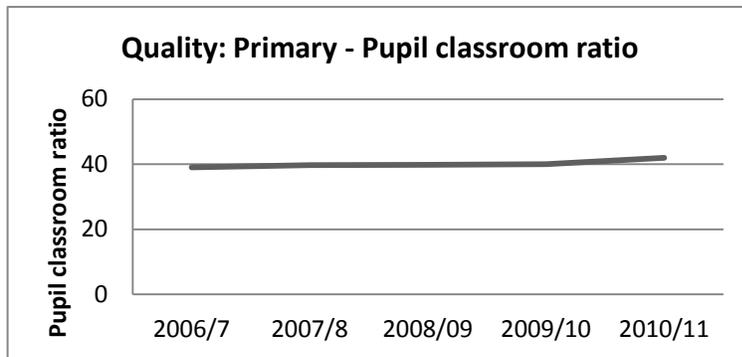


After declining since 2006/7, albeit at a lower rate in recent years, the percentage of trained teachers has increased to 63% in 2010/11. The number of trained Primary teachers has only increased by 1%

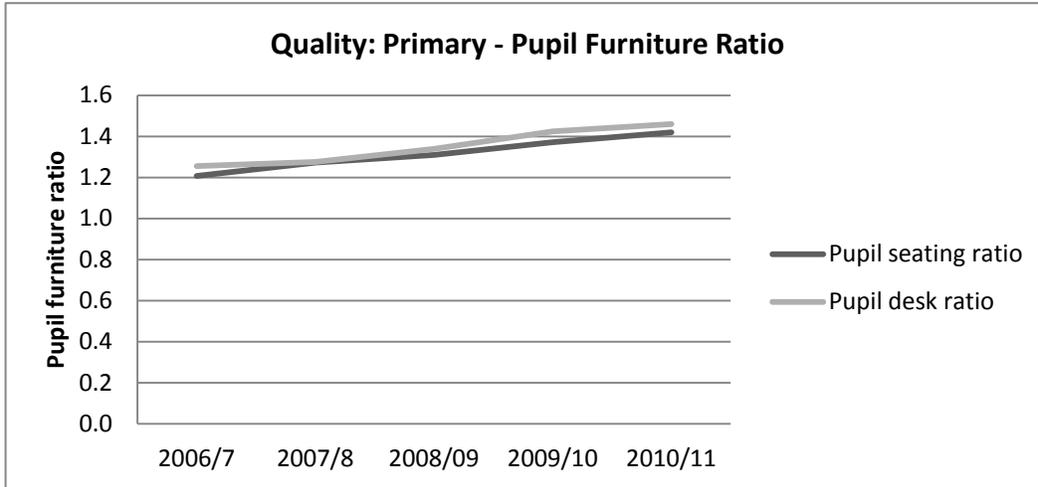
since 2009/10; however the decrease in untrained teachers has boosted the percentage of trained teachers. The percentage of trained teachers in deprived districts is 17 percentage points lower at 46%.



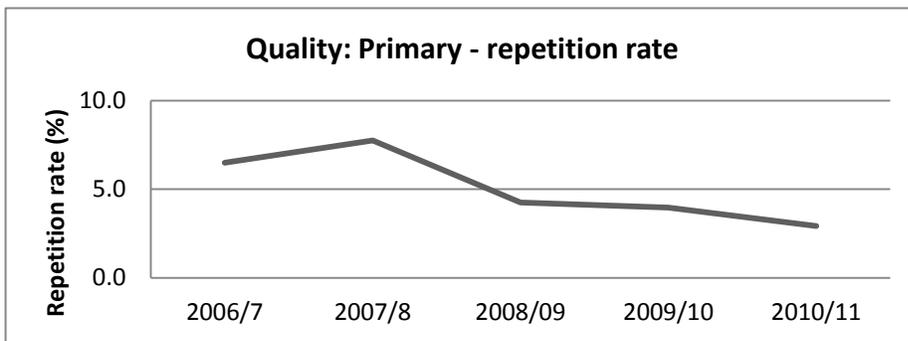
The core textbook to pupil ratio has declined steadily from 2006/7 to 2010/11. The number of textbooks per pupil has broadly halved over this period. This is a worrying trend and a reflection of the cyclical nature of textbook provision in the Ghanaian education sector. Large scale procurements boost the textbook ratios however there is not sufficient investment to sustain provision, and thus ratios suffer in light of poor textbook retention.



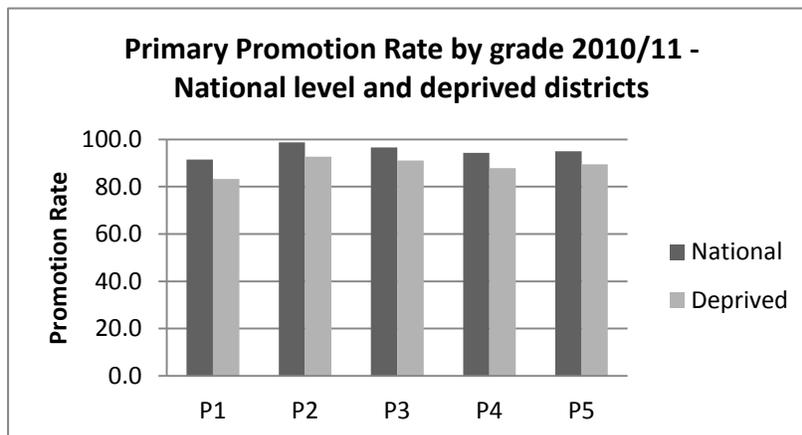
The increase in enrollment witnessed in the basic education sector has provided obvious challenges for expanding infrastructure and building new classrooms. Over the period 2006/7 to 2010/11 there has been some increase in the pupil classroom ratio, which currently stands at 42 pupils per classroom. The disparity between deprived districts and the national rate is much lower for primary than KG, with a PCR of 44.4 for the deprived districts



The provision of furniture has also come under pressure with the increasing enrollment trends. The number of pupils per seat has increased to 1.4 and the number of pupils per desk increased to 1.5. In deprived districts there are 1.7 pupils per seat and 1.8 pupils per desk.



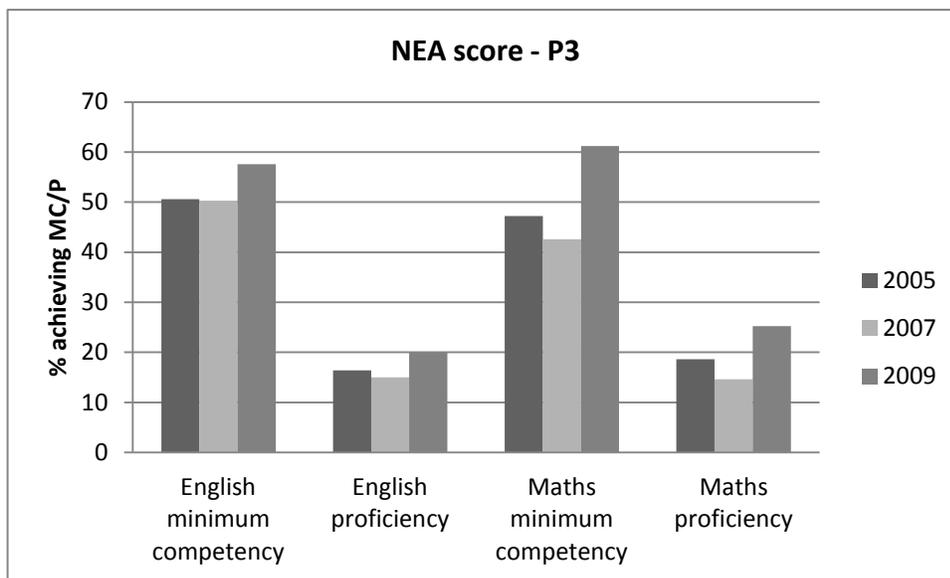
Repetition rates have more than halved since 2007/8, with rates currently standing at 2.9%.

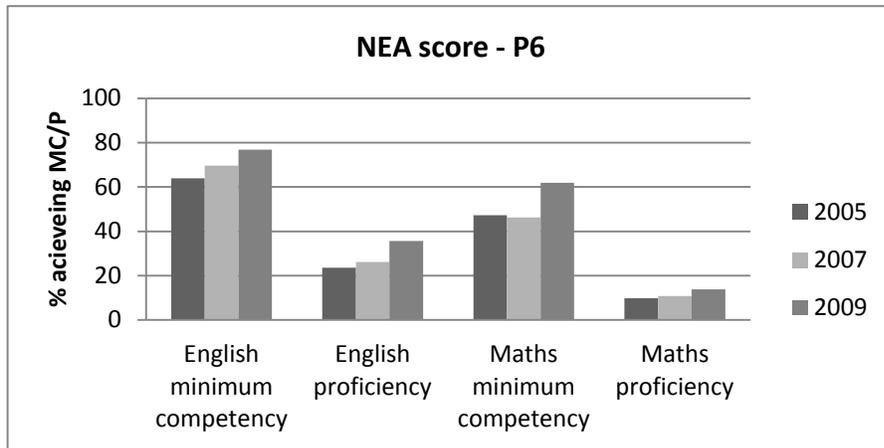


Promotion rates by grade at the primary level have fluctuated since 2006/7, but the current rates are broadly similar to those observed at the beginning of the period. The only exception is the P1 promotion rate, which at 83.6% in 2006/7 was the lowest in Primary, but which has witnessed consistent increases over the period and now stands at 91.5%. This is a significant achievement. The promotion rates for the deprived districts however are lower than the national rates, with the rate for P1 at the same level as the national P1 promotion rate in 2006/7.

NEA

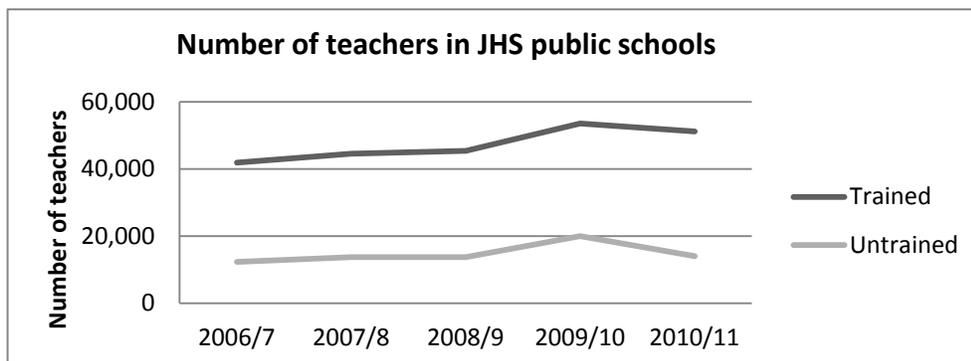
The National Education Assessment (NEA), one of the indicators of Ghana’s education quality at the basic level, is based on a random, stratified sample of pupils in Primary 3 and Primary 6. As a result of the design and sampling approach, NEA results can be generalized and compared by region, gender and type of school (public/private/project) classifications. The assessment measures pupils’ performance in English and Mathematics and answers the questions, “Are pupils achieving a minimum competency or proficiency in English and Mathematics?” and “How are pupils performing in Mathematics and English as a whole on national basis?”. The charts below reveal the progress made in these tests over the three testing cycles. It is evident that the NEA in 2009 involved an increase in results for all subjects at both levels.



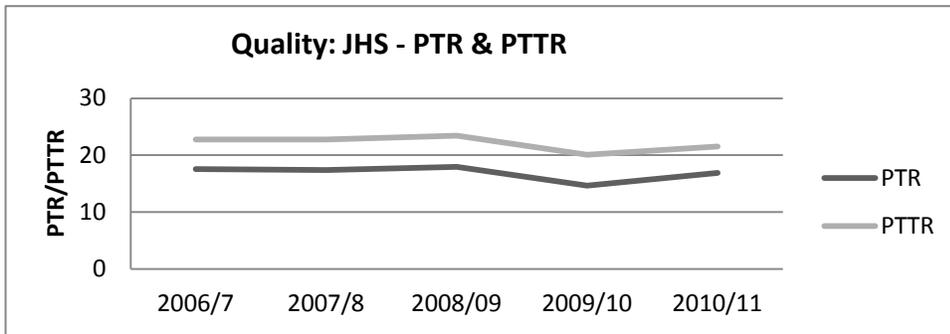


JHS

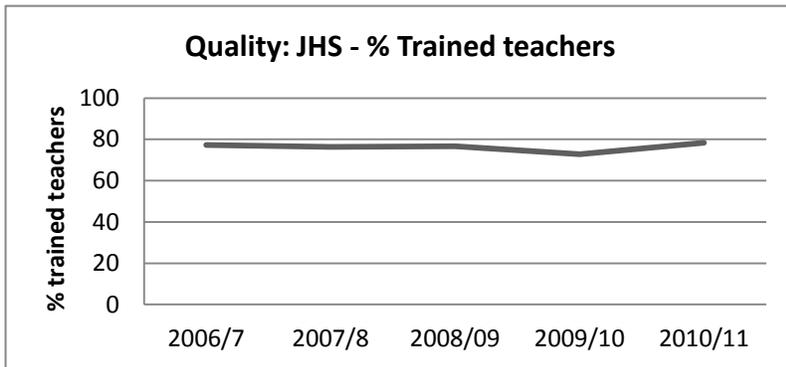
	2006/7	2007/8	2008/09	2009/10	2010/11	Deprived
PTR	18	17	18	15	17	20
PTTR	23	23	23	20	22	30
% Trained teachers	77	76	77	73	78	67
Core textbook per pupil	2.7	2.5	2.1	1.5	0.9	0.9
Pupil classroom ratio	37	37	38	37	39	43
Number trained teachers	41,865	44,570	45,421	53,545	51,126	
Number untrained teachers	12,345	13,787	13,793	19,975	14,060	
Pupil seating ratio	1.3	1.3	1.3	1.3	1.31	1.35
Pupil desk ratio	1.3	1.3	1.3	1.3	1.31	1.35
Repetition rate	5.2	5.0	3.4	3.3	3.81	3.74
Promotion JHS1	95.58	94.72	n/a	94.81	90.88	89.35
Promotion JHS2	81.32	83.65	n/a	80.39	78.28	75.14



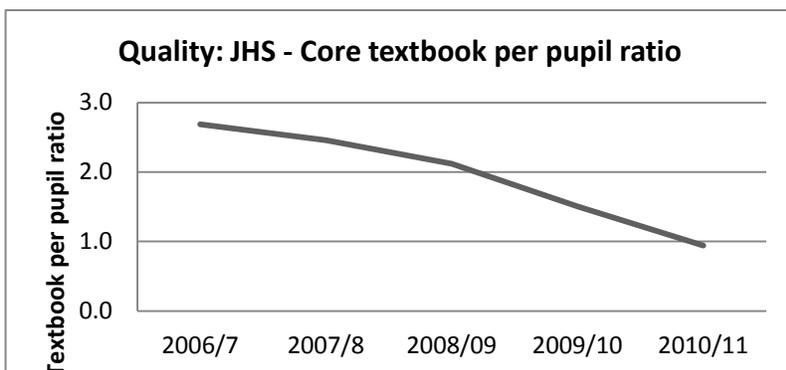
After a period of sustained growth, the number of trained teachers in JHS has declined in 2009/10. The number of untrained teachers has also shown a sharp decrease, though the omission of NYEP teachers has most likely deflated this figure.



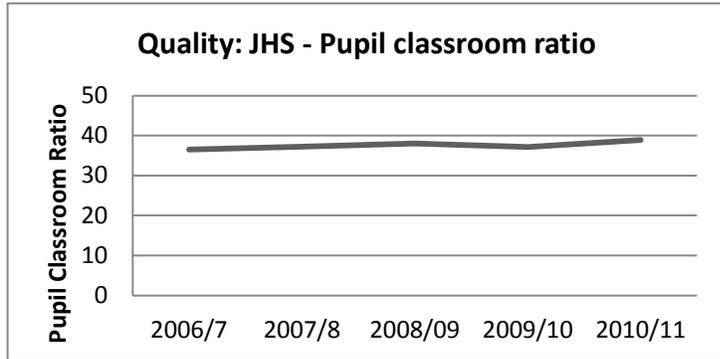
The PTR for JHS stands at 17 pupils per teacher, which is below the target of 25 in 2015. The higher PTR aims to ensure more effective deployment of teachers, as the use of subject specific teachers leads to inefficient use of teachers through low teaching hours per week. The PTR for deprived districts is slightly higher at 20, but still below the target. The decline in the number of trained JHS teachers has raised the PTTR to 22 pupils per trained teacher, which is still below the target PTR for 2015. The PTTR for deprived districts however stands at 30, which is above the 2015 target.



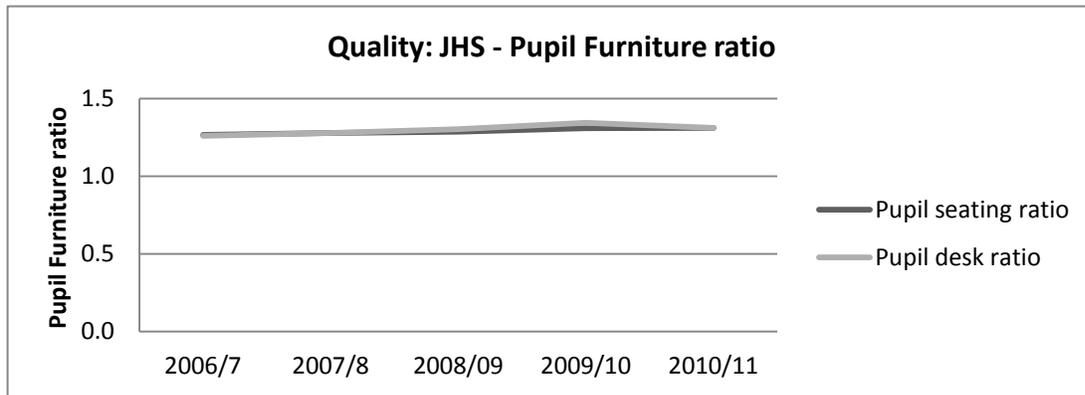
JHS possesses the highest percentage of trained teachers within the basic education system, currently standing at 78%. The recent increase in the percentage of trained teachers has not resulted from an expansion of the trained teacher cohort, but rather occurred despite a 5% decrease in the number of trained teachers at JHS. The proportionate decline in untrained teachers was however greater leading to an increase in the percentage of trained teachers. The decline in the number of trained teachers is a worrying trend in light of the target to reach 95% trained teachers in the next four years. The percentage of trained teachers in deprived districts is lower, at 67%.



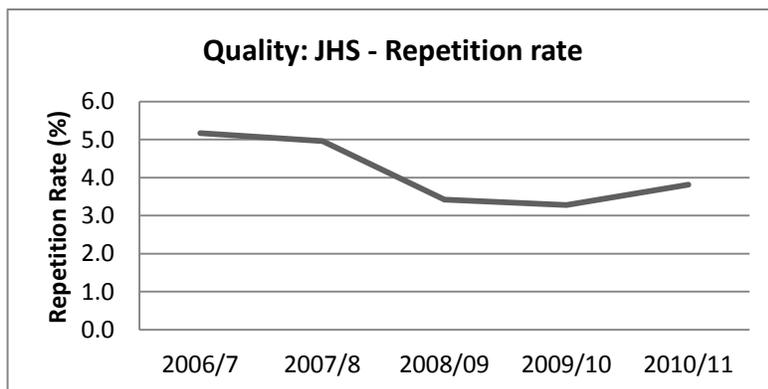
The provision of teaching and learning materials, measured by the core textbook per pupil ratio has shown a troubling decline since 2006/7, where the number of core textbooks per pupil has fallen from 2.7 to just under 1 per pupil. As with the primary level this reveals the cyclical nature of textbook procurement in the Ghanaian education sector. Textbook ratios for the deprived districts are however equivalent to the national level at 0.9 textbooks per pupil.



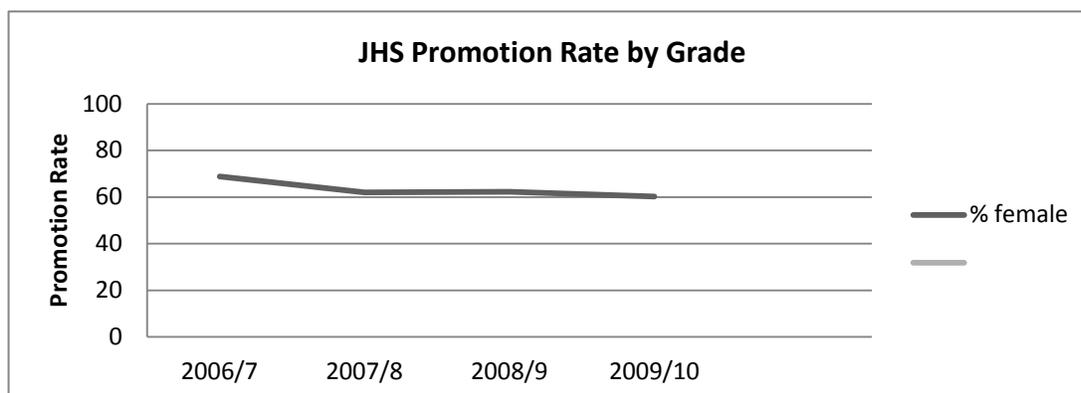
The pupil classroom ratio has fluctuated between 37 and 38 pupils per classroom since 2006/7 and has now risen to 39. The pressure on classrooms is greater in deprived districts with a PCR of 43.



The pupil seating and desk ratio in JHS has remained fairly constant since 2006/7 – increasing from 1.30 to 1.31 over the entire period. The concentration of seats and writing places is slightly lower in deprived districts, with 1.35 pupils per seating place and desk space.



The repetition rate in JHS had been declining since 2006/7, but in 2010/11 the repetition rate increased to 3.8%, erasing the decrease charted over the past two years.



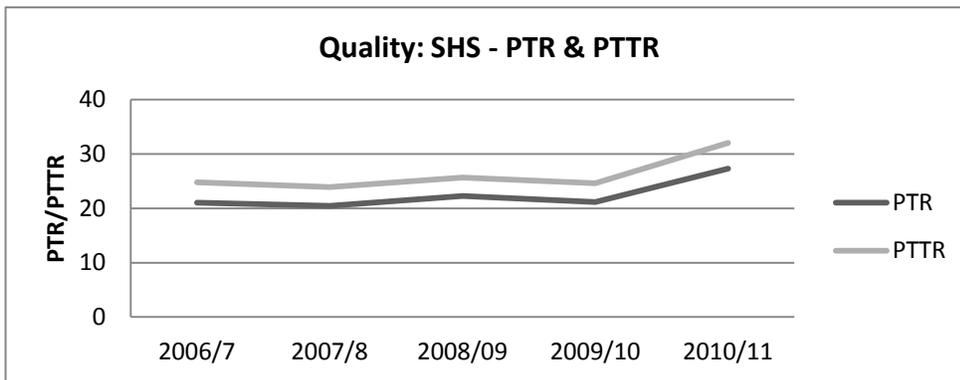
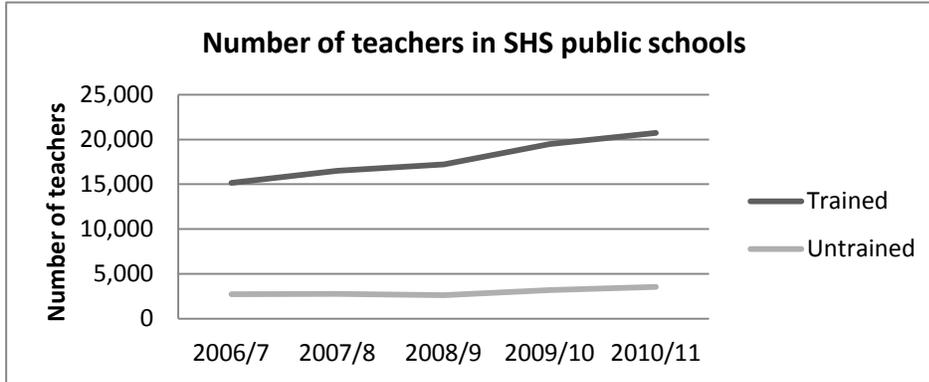
Promotion rates for JHS have decreased for both JHS1 and JHS2 over the past five years. Promotion rates for JHS1 currently stand at 91%, but are substantially lower for promotion from JHS2 into the final year which stands at 78%. The deprived districts have lower promotion rates, but the disparity is lower than at the primary level.

SECOND CYCLE

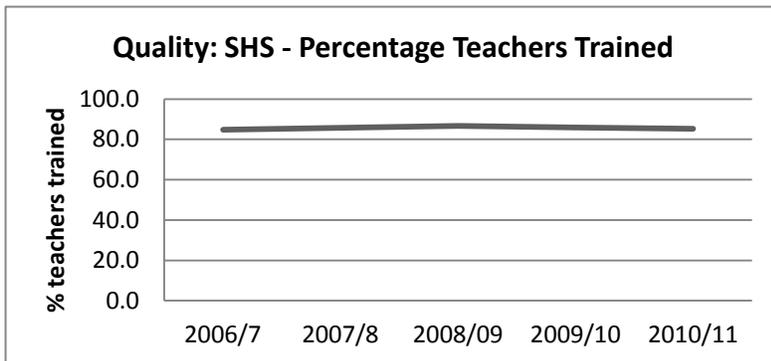
SHS

SHS: Quality	2006/7	2007/8	2008/09	2009/10	2010/11
PTR	21	20	22	21	27
PTTR	25	24	26	25	32
% Teachers trained	84.7	85.7	86.8	85.9	85.3
Textbk per pupil Eng	1.0	1.1	1.0	0.9	0.6
Textbk per pupil M	1.1	1.1	1.0	0.9	0.5
Number trained teachers	15,164	16,491	17,222	19,490	20,733
Number untrained teachers	2,733	2,761	2,629	3,207	3,560
Textbk per pupil Sc	0.6	0.6	0.6	0.7	0.5
Pupil Classroom ratio	44.2	43.6		45.8	60.4
Pupil seating ratio	1.3	1.2		1.2	1.3
Pupil desk ratio	1.5	1.3		1.4	1.3
Repetition rate (%)	2.4	1.2	2.9	0.7	0.5
Promotion rate SHS1	118.0	106.2	107.6	100.7	
Promotion rate SHS2	106.3	94.6	94.5	95.9	
WASSCE Maths Pass rate	31.6	24.2	55.1	59.6	
WASSCE English Pass rate	34.8	27.0	85.6	81.8	
WASSCE Science Pass rate	25.0	24.3	69.4	72.8	
WASSCE Social Studies Pass rate	68.0	70.1	87.7	94.8	

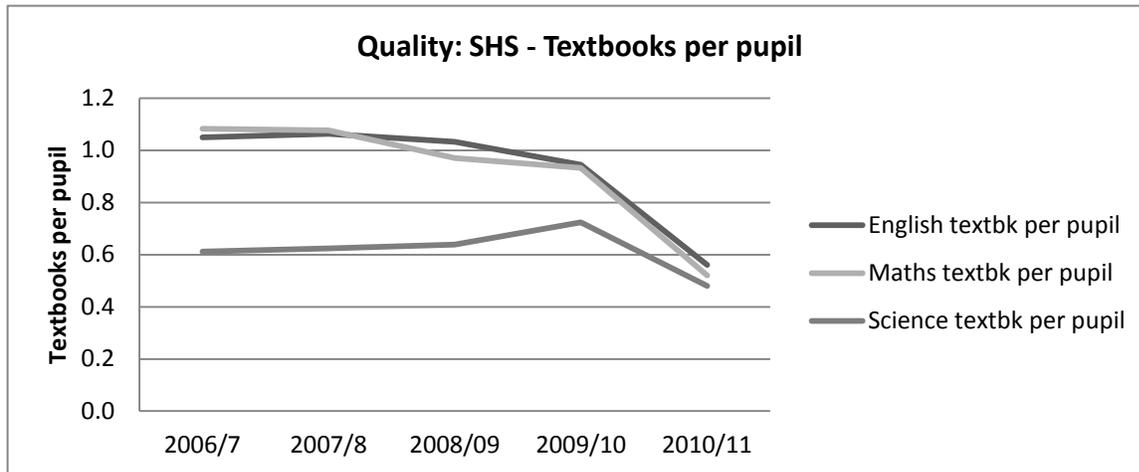
The number of trained SHS teachers has increased by 36% over the last five years, whilst the percentage of untrained teachers has increased by 30%. The growth in untrained teachers within the SHS sector has increased sharply in the last two years and provision of untrained teachers is now growing at a faster rate than trained teachers.



Despite the increases in both trained and untrained teachers, the PTR and PTTR have recently increased. The PTR had remained close to the target PTR of 22, before increasing to 25, whilst the PTTR has increased from 25 to 32 over the same period. The jump in both ratios for 2010/11 is due to the increase in enrolment brought about by the expansion to four grades in SHS this year, which the increase in teachers has not kept pace with. As the government has announced that the four year model will be phased out to revert to the three year model the increased pressure on teachers is only temporary.



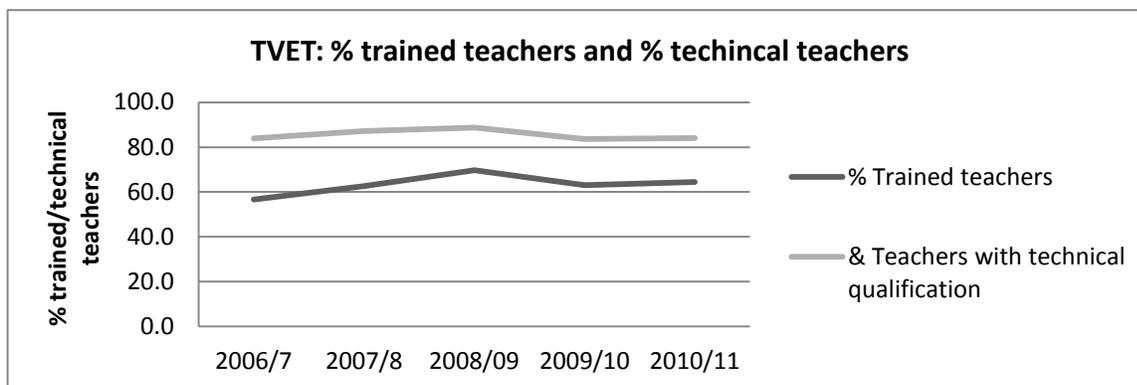
The percentage of trained teachers has fluctuated around 85-87%, which is below the target of 95%. As trained and untrained teachers are increasing at a similar rate it is unlikely that the target of 95% will be reached by 2015. When compared with the proportion of trained teachers at the basic education level, which remain woefully below target, the performance in SHS can however be considered strong in this regard.



The number of core textbooks per pupil has fallen dramatically in 2010/11, but English and Maths textbooks had been exhibiting a downwards trend in recent years and by 2009/10, both had fallen below one textbook per pupil. This is most likely a combination of the cyclical nature of textbook distribution witnessed in the basic sector, with the move to a four year SHS programme and the extra pressure this will have placed on all resources.

TVET

TVET: Quality	2006/7	2007/8	2008/09	2009/10	2010/11
% Trained teachers	56.7	62.6	69.7	63.0	64.4
% Teachers with technical qualification	83.9	87.1	88.7	83.6	84.1



The percentage of trained teachers within TVET has increased over the five year period, but peaked in 2008/9 at 69.7. The percentage of teachers with a technical qualification has fluctuated, hitting a high of 88.7 also in 2008/9, but overall the share of technical teachers has only increased by 0.2 percentage points over the five years under consideration.

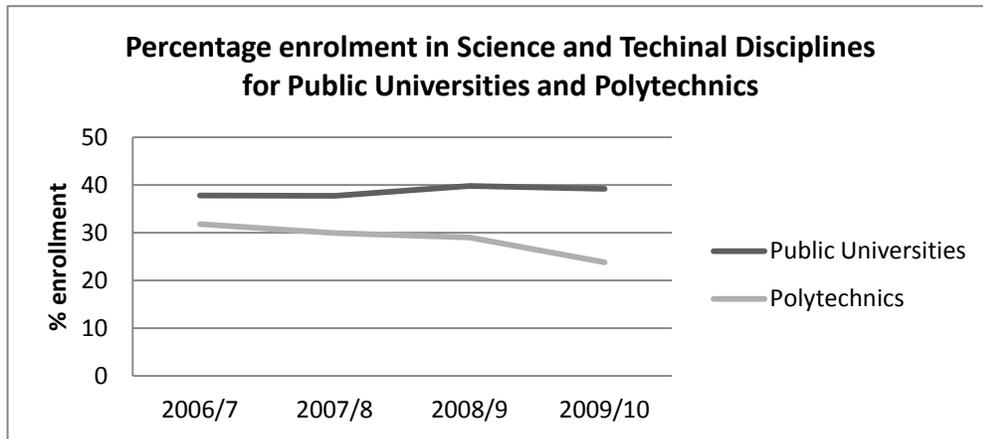
Policy Objective 6: Promote Science and technical education at all levels

Relevance of education in the sector’s policy documents focuses on increasing the prominence of science and technical subjects. Although it is intended that this is addressed at all stages of education, the only measurable indicator at present is in the percentage enrollment in science and technical disciplines at the tertiary level, with targets explicitly stated in the ESP.

Main findings

Enrolment in science and technical disciplines currently lies far short of the targets for both Public Universities and Polytechnics.

	2006/7	2007/8	2008/9	2009/10
Enrollment in science and technical disciplines (%) – Public Universities	37.8	37.7	39.8	39.2
Enrollment in science and technical disciplines (%) – Polytechnics	31.8	29.9	29.0	23.8



Enrollment in science and technical disciplines has been increasing in Public Universities but currently stands at 39%, well below the target of 60%. Growth in enrolment in these disciplines relative to humanities has been slow and there seems little chance of reaching the target in the near future at these current rates. The proportion of students enrolled in science and technical disciplines in Polytechnics is much lower, at 23.8%. The target for Polytechnics is for 80% of students enrolled to be enrolled in science and technical disciplines, but their share of enrolment has been decreasing since 2006/7.

Issues arising

- There has been limited progress in increasing the percentage of tertiary enrollment in science and technical disciplines. It is unclear however if the targets selected have been motivated by an appraisal of the needs and capacities of the Ghanaian economy. Whether these targets should thus be pursued in the face of falling demand at least for Polytechnics is thus an issue for further discussion.

THEMATIC AREA: ECONOMIC

The last thematic area addresses issues of efficiency and effectiveness within the education sector in Ghana.

Economic: Policy Objectives
7. <i>Strengthen links between tertiary education and industry.</i>
8. <i>Improve management of education service delivery.</i>

Policy Objective 7: Strengthen links between tertiary education and industry

The ESP work programme includes two indicators for measuring the links between tertiary and industry: % of all coursework science based and % of all research funding from non governmental sectors. NCTE were however not able to provide us with the requested data in time for the submission of this report. However, the final performance report would include some literature from other work after the annual review.

Policy Objective 8: Improve management of education service delivery

This section will draw the linkages between the public finance of education and its management to achieve results. Management of education service delivery is pivotal across all levels of education in the light of the competing priorities so as to ensure effective resource allocation for value for money

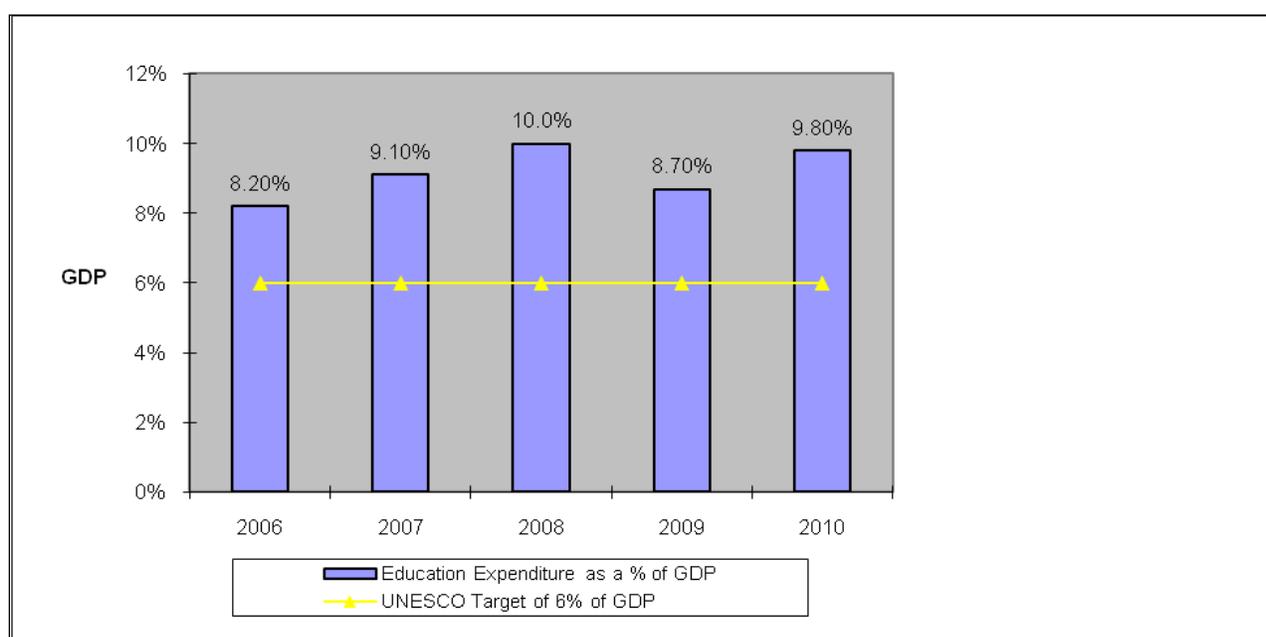
Public Expenditure in education

Education expenditure as a share of GDP has hovered around a staggering 8.2% minimum and 10.1% maximum over the last past 5 years. Likewise, education expenditure as a percentage of total government spending has been on the average a fifth over the period (table 8.1). In 2010, education's share of total government spending and as a percentage of GDP is 23.2 % and 9.8% respectively.

UNESCO and the African Union's suggestion is that actual expenditure should be approximately 6% of GDP and clearly Ghana surpasses these levels of education expenditure.

Table 8.1: Trends in Education Expenditure as a share of GDP and Total Public Spending

Source	2006	2007	2008	2009	2010
GoG	648,325,700	867,133,297	1,219,028,427	1,461,721,144	1,825,819,889.41
Donor	25,271,400	86,948,363	100,652,087	95,067,893	64,742,440.45
IGF	102,238,400	110,689,258	164,097,989	210,524,567	302,013,753.62
GETfund	118,628,200	164,333,280	212,541,633	150,636,100	313,283,250.00
HIPC/MDRI	44,560,500	44,435,287	47,251,582	31,818,711	58,504,023.82
Total	939,024,200	1,273,539,485	1,743,571,718	1,949,768,414	2,564,363,357
GDP	11,490,320,000	13,974,584,000	17,617,600,000	21,630,000,000	26,159,000,000
Total Government Expenditure	4,331,683,643	6,070,923,313	9,538,244,209	8,756,146,694	11,039,923,940
Education Exp. as a % of GDP	8.2%	9.1%	10%	8.7%	9.8%
Education Exp. as a % of Total GoG Exp.	21.7%	21.0%	18.3%	21.6%	23.2%



The rebased GDP² indicates that the current level of education expenditure as a share of GDP is 5.8% which actually put Ghana below the UNESCO target of public spending on education of 6%. This gives

² Rebased GDP is not used here yet because the source of our GDP “The Budget Statement and economic Policy 2011” does not reflect the rebased figures.

the education sector a reality check that the apparent high trend of education expenditure as percentage of GDP could only be a mirage therefore together with efficient resource utilization there is the need for some more investment to the education sector.

Table 8.2: Trends in Education Expenditure by levels

Sources	2006		2007		2008		2009		2010	
	Expenditure GH¢	%	Expenditure GH¢	%	Expenditure GH¢	%	Expenditure GH¢	%	Expenditure GH¢	%
Pre-school	37,144,800	3.9	42,797,283	3.4	65,901,027	3.8	60,272,779	3.1	72,036,051	2.8
Primary	262,627,200	27.6	445,933,605	35.0	613,661,054	35.2	594,950,694	30.5	715,160,506	27.9
JHS	159,921,600	16.8	206,990,933	16.3	292,419,320	16.8	297,665,072	15.3	370,235,825	14.4
SHS	150,382,800	15.8	160,788,917	12.6	171,058,251	9.8	337,369,027	17.3	400,030,646	15.6
TVET	8,599,900	0.9	8,236,942	0.6	18,311,207	1.1	35,038,819	1.8	38,436,313	1.5
SPED	3,835,600	0.4	3,894,322	0.3	10,662,566	0.6	7,493,238	0.4	17,214,633	0.7
NFED	6,736,900	0.7	5,709,015	0.4	6,327,284	0.4	3,715,031	0.2	13,357,023	0.5
Teacher Education	33,119,000	3.5	33,132,980	2.6	55,274,368	3.2	50,377,753	2.6	62,056,093	2.4
Tertiary	214,564,500	22.5	292,931,474	23.0	378,615,134	21.7	401,191,936	20.6	511,806,744	20.
Mgt. & Subvtd	73,438,400	7.7	70,339,643	5.5	130,011,299	7.5	160,837,566	8.2	362,459,208	14.1
HIV-AIDS	2,474,300	0.3	2,784,370	0.2	1330209	0.1	856,499	0.0	1,570,316	0.1
Total	952,845,000	100	1,273,539,485	100	1,743,571,719	100	1,949,768,414	100.00	2,564,363,357	100

Table 8.3: 2010 Expenditure by sources and item

Sources	PE	Administration	Service	Investment	Total	%
GoG	1,776,291,862.25	33,996,734.61	12,991,964.20	2,539,328.35	1,825,819,889.41	71.2%
Donor	-	-	45,603,887.24	19,138,553.20	64,742,440.45	2.5%
IGF	21,893,024.21	26,447,456.98	144,161,919.20	109,511,353.23	302,013,753.62	11.8%
GETfund	-	-	16,803,386.54	296,479,863.46	313,283,250.00	12.2%
HIPC	-	-	52,984,228.00	5,519,795.82	58,504,023.82	2.3%
Total	1,798,184,886.46	60,444,191.59	253,142,996.08	136,709,030.60	2,564,363,357	1.00%
	<u>70.1%</u>	<u>2.4%</u>	<u>10.6%</u>	<u>16.9%</u>		

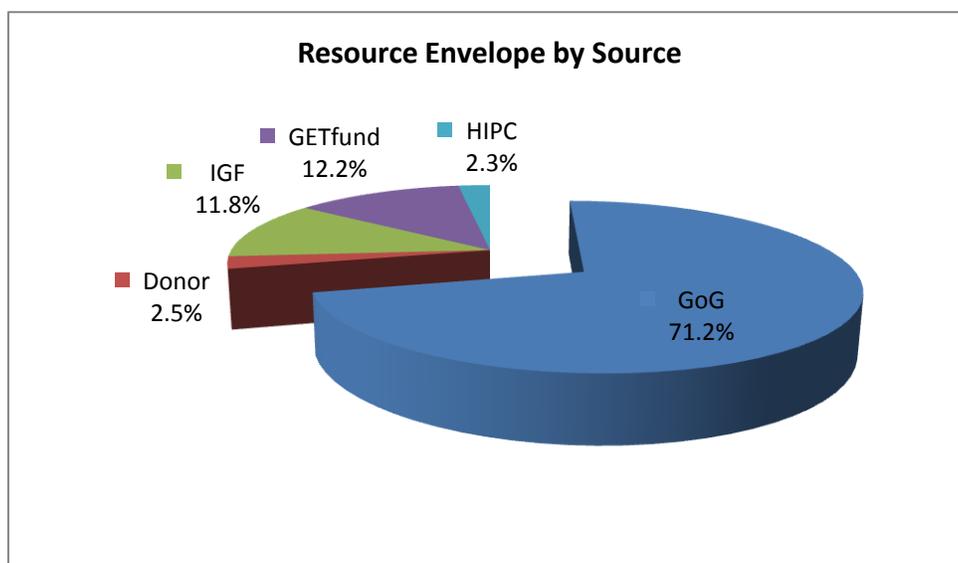


Table 8.4 Expenditure by level of education and item 2010

Level	PE	Administration	Service	Investment	Total	%
Pre - School	66,044,202.85	292,975.62	2,309,147.48	3,389,724.90	72,036,050.86	2.8%
Primary	644,808,566.20	1,336,772.16	37,522,972.98	31,492,194.92	715,160,506.26	27.9%
JHS	323,676,084.61	873,684.92	27,223,252.63	18,462,803.21	370,235,825.37	14.4%
SHS	134,841,925.28	12,149,305.25	116,639,206.98	136,400,208.43	400,030,645.93	15.6%
TVET	15,490,907.59	1,571,025.12	11,859,500.71	9,514,879.58	38,436,313.01	1.5%
SPED	6,222,517.21	2,640,674.83	787,669.00	7,563,771.46	17,214,632.50	0.7%
NFED	11,258,214.84	1,289,604.63	782,273.47	26,929.65	13,357,022.59	0.5%
Teacher Education	60,762,025.08	163,596.67	626,219.40	504,251.43	62,056,092.58	2.4%
Tertiary	287,093,860.67	32,633,221.44	38,219,893.67	153,859,768.32	511,806,744.10	20.0%
Mgt. & Subvtd. Agen.	247,986,582.14	7,493,330.95	35,004,932.97	71,974,362.15	362,459,208.21	14.1%
HIV-AIDS	-	-	1,570,315.89	-	1,570,315.89	0.1%
Total	1,798,184,886.46	60,444,191.59	269,946,382.62	433,188,894.06	2,564,363,357.30	100%

The above table 8.3 and 8.4 depicts a breakdown of total expenditure in 2010 by source and level respectively. PE accounts for 70.1% of the total expenditure in the education sector.

Administration, Service and Investment account for 2.4%, 10.6% and 16.9% respectively. GoG funds are the bulk of the expenditure at 71.2%, followed by GETFund expenditure at 12.2%. Internally Generated Funds provide 11.8% of expenditure and donors and HIPC 2.5% and 2.3% respectively.

GoG only Expenditure

The following table gives the breakdown of GOG expenditure by Item and by level of education. PE constitutes 97.3% of the total expenditure, which means that the government pays the majority of the salary costs in education (compare to 70.1% on PE for total expenditure). Administration, Service and Investment account for 1.9%, 0.7%, and 0.1% respectively. This implies that salaries continue to account for the largest share of expenditures and that resources are likely scarce for programmes and investment for education service delivery. This has a great impact on the quality of education.

Table 8.5: GoG (only) Expenditure 2010

Level	PE	Administration	Service	Investment	Total	%
Pre-school	66,044,202.85	292,975.62	-	-	66,337,178.47	3.6%
Primary	644,808,566.20	1,336,772.16	-	-	646,145,338.36	35.4%
JHS	323,676,084.61	873,684.92	-	-	324,549,769.53	17.8%
SHS	134,841,925.28	2,224,814.10	114,585.62	-	137,181,325.00	7.5%
TVET	15,490,907.59	468,303.88	4,437.00	-	15,963,648.47	0.9%
SPED	6,222,517.21	2,640,674.83	787,669.00	-	9,650,861.04	0.5%
NFED	11,258,214.84	1,289,604.63	782,273.47	26,929.65	13,357,022.59	0.7%
Teacher Education	60,762,025.08	163,596.67	24,073.40	-	60,949,695.15	3.3%
Tertiary Mgt. & Subvtd	265,200,836.46	18,037,871.97	981,519.99	852,611.88	285,072,840.30	15.6%
	247,986,582.14	6,668,435.82	10,297,405.72	1,659,786.82	266,612,210.50	14.6%
HIV-AIDS					-	0.0%
Total	1,776,291,862.25	33,996,734.61	12,991,964.20	2,539,328.35	1,825,819,889.41	100%
	<u>97.3%</u>	<u>1.9%</u>	<u>0.7%</u>	<u>0.1%</u>		

The largest proportion of the GoG budget is spent on primary education (43%). This is close to the suggested international norms described above. JHS receives the second highest share with 20%, followed by 18% at the tertiary level which is much higher than international norms. The remaining levels of education receive minimal proportions of the total expenditure, notably, TVET with less than 1% of the GoG budget. This does not reflect GoG prioritization of TVET education.

FTI benchmarks on best practice suggest that no more than 65 percent of the recurrent education budget go for salaries in order to provide for essential non-salary inputs. GoG recurrent expenditure is 99.6% of the budget and total recurrent expenditure is 80% of the budget. Salaries are the largest part of that (far higher than 65%). Thus, in Ghana, the level of spending on salaries from recurrent expenditure is too high.

Table 8.6: GoG Execution Rate 2010

	PE			Administration		
Budget Head	Allocation	Expenditure	% Execution	Allocation	Expenditure	% Execution
Main Ministry	164,378,000	176,675,232	107.5%	5,665,257	5,721,708	101.0%
GES Headquarters	2,525,339	3,945,463	156.2%	5,327,690	4,771,805	89.6%
GES Regional	776,344,133	1,324,398,500	170.6%	8,966,672	4,992,704	55.7%
Institutions of the Handicapped	4,151,355	6,071,830	146.3%	705,638	472,646	67.0%
Tertiary	256,000,000	265,200,836	103.6%	12,800,000	18,037,872	140.9%
Total	1,203,398,827	1,776,291,861	147.6%	33,465,257	33,996,735	101.6%
	Service			Investment		
Budget Head	Allocation	Expenditure	% Execution	Allocation	Expenditure	% Execution
Main Ministry	5,405,000	4,903,163	90.7%	550,000	112,391	20.4%
GES Headquarters	5,796,767	3,326,079	57.4%	0		0.0%
GES Regional	7,867,101	3,004,071	38.2%	3,050,000	1,574,326	51.6%
Institutions of the Handicapped	777,132	777,132	100.0%	0	0	0.0%
Tertiary	4,948,377	981,520	19.8%	746,389	852,612	114.2%
Total	24,794,377	12,991,965	52.4%	4,346,389	2,539,329	58.4%

Table 8.6 above shows the overall execution rate for GoG funds was 144%. The execution rate for PE was 147%, indicating that the salaries are hugely under-budgeted. The execution rate for Administration was 101.6%. That for Service was 52.4% overall and this may be likely due to: that

many of the service activities that were budgeted for were not carried out, or the money was re-allocated elsewhere. The execution rate for Investment was 58.4%. This is not as low as the Service execution rate but the same two possibilities remain.

Unit Cost

Table 8.7 : Unit Cost and per head expenditure

Level		2006	2007	2008	2009	2010
Primary	Per Capita GH¢	91.49	149.10	201.74	191.97	223.59
	Unit Cost GH¢	85.14	132.90	189.02	180.55	213.75
JHS	Per Capita GH¢	164.98	203.83	274.81	276.89	336.37
	Unit Cost GH¢	155.60	183.51	256.73	259.74	319.60
SHS	Per Capita GH¢	412.33	525.36	387.60	703.88	602.91
	Unit Cost GH¢	250.36	204.76	281.12	636.35	397.33
TVET	Per Capita GH¢	195.86	171.84	378.74	884.64	-
	Unit Cost GH¢	194.31	170.91	304.81	649.94	-
TERTIARY	Per Capita GH¢	1,766.11	2,281.02	2,681.33	2,619.82	-
	Unit Cost GH¢	1,153.58	1,641.29	2,012.37	2,034.48	-

Table 8.7 outlines the cost per student for each level of education. The per capita cost is the total expenditure on that level of education divided by public enrolment at that level. The unit cost is the recurrent expenditure divided by public enrolment at that level. The unit cost and per capita cost are both increasing by level of education. That of tertiary exceeds that of primary by a factor of more than 10 in 2009. At each level, both the per capita cost and the unit cost are increasing over time.