CHAPTER TWO: SECOND CYCLE EDUCATION

2.1 Introduction

This chapter reviews the status of second cycle education in the context of the 1987 reforms, highlights the key issues of concern and identifies challenges that need to be addressed. It concludes with recommendations for a way forward. The following were the key challenges and issues that were identified:

- Access and Participation
- The Impact of the Diversification of the SSS Curriculum
- Performance of SSS candidates in the SSSCE
- The Under-enrolled Community Secondary Schools
- Alternatives to the SSS in Second Cycle Education
- The Case for a 4-Year SSS
- Equity Measures in Secondary Education

Access and Participation in the SSS.

After 15 years of educational reforms approximately 61% of Ghanaian children enter JSS. The output of the JSS is about 230,000. About 70,000 gain admission[1] into SSS. About 14,000 enter formal technical and vocational institutes. Others are in the job market, world of work, or are enrolled in various private sector technical and vocational training institutes.

Students in second cycle institutions of various kinds represent about 17 % of the age group. About 35% of the products[2] of the JSS enter the SSS. The GPRS forecasts that participation in the SSS will grow from 17 to 25% by 2004. Enrolments in SSS grew from about 146,000 of the age group in 1987/1988 to 195,000 in 1997/1998 and 204,000 in 2000/2001. The number of public secondary schools increased from 240 to 474. The number of technical institutions has not changed-- the total number now lies at 23. Many Community Day Secondary Schools began in the 1990s to make secondary school more accessible without the additional costs of boarding and lodging are under enrolled. A sizeable number have less than hundred pupils. Most of these “new” SSSs are located in small communities, without the boarding facilities to attract pupils from the large towns/ other communities and staff houses to attract good teachers.

[1] English Language and Mathematics are core subjects taken by all SSS students. SSSCE candidates who wrote these examinations give a fairly accurate of pupils who complete SSS. The numbers for 1999, 2000 and 2001 were as follows respectively: 59,871; 62,528; 66,444. For Mathematics the same years the numbers were 59,684; 62,414; 66,293. Data from WAEC.

[2] BECE candidates for 1999 and 2000 were 233,740 and 233,782 respectively. Data from WAEC

The Impact of the Diversified SSS Curriculum

A major objective of the 1987 reforms was to diversify the curriculum away from the more academic, grammar school type curriculum that characterised the old secondary school system. Table 12 shows the numbers of candidates and their elective subject offerings in the 1999 to 2001 SSSCE. Candidate numbers are highest in elective Economics, followed by elective Mathematics, Physics, Business Mathematics and Accounting. In the Technical programme, the highest number took Technical Drawing followed by building construction and woodwork. A much smaller number of students took applied electricity, auto-mechanics and electronics. Table 17 shows a breakdown of the numbers for 2001. Management in living, clothing, foods and nutrition are taken mainly by the girls.

Experts in TVET argue that the SSS environment makes the teaching of technical subjects more theoretical than practical. They don't think that the secondary technical schools offer a good environment to train for polytechnic education. They advocate the establishment of Technical Institutes as the proper foundation for polytechnics.

The products of the SSS, irrespective of electives offered, see the university as their first option. Thus agricultural electives are encouraged to select elective chemistry to improve their chances of admission into universities. The prospects for tertiary education for students who take programmes other than general arts and science are rather limited.

Table 12: Subject Offerings in the SSSCE 1999 - 2001

Programme	Subject	1999	2000	2001
Core (All)	English	59,871	62,528	66,444
Core (All)	Mathematics	59.684	62,414	66,293
Science (*Elective*	Mathematics	15,217	16,731	19,952
Science	Physics	12,456	13,434	13,998
Science	Biology	7,939	8,075	8,375
Arts (*Elective)*	Economics	23,396	26,113	30,638
Arts	History	7,555	8,233	8,810
Arts	Geography	9,767	9,705	10,960
Arts	French	4,616	4,598	5,192
Agriculture	General Agric	-	7,398	7,101
Business	Accounting	10,085	11,196	12,059
Business	Business Math	12,224	13,276	14,230
Technical	Tech. Drawing	3,731	3,656	3,432
Vocational	Foods & Nutrit.	4,917	5,140	5,247

Source: WAEC

Diversification of the curriculum has gone a long way but has been frustrated by the scarcity of teachers in technical and vocational subjects. The Vocational and Technical Centres (Votec) Centres will hopefully provide more practical training to students in the technical and vocational areas. There are currently 20 such centres established throughout the country as part of an ongoing project funded by the Dutch Government.

The main issue in diversification of the secondary school curriculum also described as "vocationalization" is aimed at facilitating transition to the world of work. A recent study by Lauglo, Akyeampong, Mwiria, and Weeks, 2002 entitled "Vocationalised Secondary Education Revisited" which was carried out for the World Bank using case studies from Botswana, Ghana and Kenya, has important lessons for Ghana. The study concluded as follows:

- Given the urgent improvements needed in quality of core general education in language, maths, and science, and given the high cost of vocational education, the mainstream secondary education should not be the priority in teaching of vocational skills. There is no concrete evidence that students in the vocational stream are less likely to remain unemployed in depressed economies;

- Vocational skills are better taught in specialised training centres which have appropriate links to the labour market;

- Enhanced general academic skills which are good for living are also good for the world of work;

- Training in ICT as non-examinable computer awareness or use of computer applications is recommended because of wider applications across disciplines;

- Agriculture and business studies are recommended because they are relatively more affordable.

In the circumstances of Ghana, where many SSS students have poor literacy and numeracy skills, the recommendations sound appealing but the case for the specialised technical and vocational institutes is even stronger (see section 2.2).

Performance of candidates improved in the SSSCE

Since the poor performance of the first crop of SSS students in the 1993 SSSCE there have been numerous calls on the MOE to extend the duration of the SSS from three to four years. The MOE did not accept the recommendation of the Education Reforms Review Committee (ERRC) that the duration must be increased. The 1999 National Education Forum also recommended four years. The MOE's position is that as the inputs into the SSS increase and teachers become more familiar with the new curriculum, performance would improve. Figures such as in Table 13 below are cited as proof that this is happening.

Table 13: Student Performance in SSSCE Core Subjects (1997 – 2000)

SUBJECT	YEAR	CAND. NO	NO. GRADES A - E	PERCENT.
English Language	1997 1998 1999 2000	75760 77187 59871 62528	33100 37902 21545 36532	43.7 49.1 52.7 58.4
Mathematics	1997 1998 1999 2000	72127 76457 59684 62414	27135 26551 28778 36557	37.6 34.7 48.2 58.6
Integrated Science	1997 1998 1999 2000	65588 67347 59692 62397	30902 30283 23476 31897	47.1 44.9 39.3 51.1
Social Studies	1997 1998 1999 2000	58918 60052 59655 62397	36591 40713 46104 49546	62.1 67.8 77.3 79.4

It is arguable whether performance can be adjudged acceptable when as many as 40 to 50 % of candidates fail in the core subjects of English and Mathematics. The distribution of the grades of candidates shown in tables 14 and 15 reveal that an overwhelming number of students obtain Grade E or fail in the individual subjects. These poor SSS results are partly attributable to the low quality and poor performance of the JSS intake particularly in the new SSS's.

Table 14: Percentage of Candidates obtaining Grades A to E in Core Mathematics

Year	A	B	C	D	E	F
1999	6.16	8.62	5.28	7.70	20.43	51.30
2000	7.97	11.46	7.15	10.87	21.89	40.92
2001	6.63	8.69	6.09	7.26	20.01	51.00

Table 15: Percentage of Candidates obtaining Grades A to E in Core English

Year	A	B	C	D	E	F
1999	0.48	4.17	5.24	8.72	34.05	46.64
2000	0.69	5.77	7.19	10.79	33.96	40.85
2001	0.87	6.18	7.55	11.73	34.75	38.57

Source: WAEC

When the performance of a top school such as the Presbyterian Boys School (PRESEC), Accra, is compared with the national performance of students at SSS level--- the case for a three-year senior secondary school for all students is weak. The ESR revealed that while the results of the top schools may be impressive, the majority of pupils obtain weak SSSCE grades. Annex 14 compares PRESEC results in English and Mathematics with the national SSS results for years 2000 and 2001 combined.

Under-Enrolled Schools

Many of the 140 Community Secondary Schools, which were established after the reforms, suffer from serious under-enrolment as shown in Table 16. There is pressure on the MOE/GES to make these schools boarding schools particularly to increase the number of female entrants. A favoured position is that the District Assemblies provide them with hostels and staff housing. The District Assemblies may wish to build them hostels and staff housing, but other arrangements should be made to minimise the cost of boarding and lodging. The majority of these schools, which are located in rural areas, have fertile farmland, which provides an opportunity to try another solution to improve rural secondary education. These schools should use the land to produce some of their food to reduce the cost of boarding and lodging to parents. Another approach would be to provide the lodging facilities and the students within an area cook their own meals, which is the approach that many new SSSs are currently under taking.

Table 16: Under-Enrolled Schools as at August 1st 2002

Region	Less than 70	70 t0 100	100 to 130	130 to 160	Total
Volta	6	4	5		15
Central	1	3			4
Eastern	1	2	1		4
Western	1	2			3
Ashanti	2	1	1		4
Brong Ahafo	1	1	1	1	4
Northern	0	1			1
U. East	1				1
U. West	0	3			3
Total	13	17	8	1	**39**

(MOE, SSS Division, 2002)

Alternatives to the SSS in Second Cycle Education

The poor performance of most SSS students in the SSSCE suggests that many students in the SSS may be wasting their talents in general education. Britain, which pioneered the comprehensive secondary school, is currently promoting diversity and flexibility in secondary education. Schools are being granted more autonomy to decide on ways in which they can be different and yet excellent (UK. Education Bill 2000).

As observed in the section on TVET, the secondary technical school pioneered by the Ghana Secondary Technical School (GSTS) may be a good model where technologically inclined pupils can be educated. GSTS products have been performing at the same standard as their counterparts in the best-endowed schools. The model may not necessarily work in schools where many pupils are weak academically. Moreover the experts in TVET (Kwami, et al, 1998) prefer the Technical Institute to the Secondary Technical School

model since it focuses the child on technical education and provides a stronger foundation for polytechnics.

The Draft TVET Policy Framework for Ghana (2001) which had been developed for the MOE and the Ministry of Manpower Development and Employment (MMDE) recommends the Technical Institutes, Vocational Institutes, Apprenticeship Training Schools and Farm Institutes are worthy alternatives to the general arts and general science SSS. The challenge remains in attempting to orient JSS school leavers to these alternative routes. Guidance and Counselling programmes at JSS level will have to be improved in order to create awareness of the options students have on completion in of JSS.

The Case for the 4 Year SSS in deprived rural areas

The results of the analyses of the SSSCE suggests that the 3 year duration cannot achieve acceptable standards in the less endowed schools which are also the same schools that admit the weakest BECE candidates. Given that teaching and learning will not significantly improve in the public primary and JSS in the medium term to produce well-prepared students at the SSS level—a four-year programme for SSS should be considered for such schools.

The MOE must seriously consider the immense cost to the nation of the poor quality of basic schools and the repercussions this has on the entire system (i.e. second cycle, tertiary level institutions and teacher education). The high failure rate in the SSSCE is a tremendous human capital problem facing the nation (between 40-50% failure rates in Math and English the core subject areas—see table 11). The ESR team found that poor quality primary education had permeated the entire education system causing paralysis in several institutions, most importantly teacher education. Selection for the teacher education colleges has become a crisis due to the poor quality of candidates and lack of qualified female entrants to the programme. **The focus of Government action to improve quality must be at the basic level.** The cost of adding an additional year at the Senior Secondary level is a short-term solution to the endemic problem of poor quality at basic level.

Confronting Equity Measures in the SSS

All the evidence so far suggests that unless a significant intervention at SSS level takes place the huge socio-economic divide in educational opportunity cannot be bridged in the medium term. The consequences for social order should be seriously considered. The findings from Addae-Mensah, Djangmah and Agbenyega (1973) and Addae-Mensah (2000) reveal the serious inequity in quality secondary education in Ghana. The recent Addae-Mensah study found that a very small proportion of SSSs (50 out of the 474 SSS's) take most of the places in Ghana's publicly funded universities. Access to these schools is often outside the reach of pupils from most public schools especially those from rural areas. The findings reveal that there are

many students in the public schools that cannot find places in the top SSSs and cannot make their way to universities. This is a serious inequity issue, which many education systems are confronting around the world.

The policy to reserve 30% of places in the top secondary schools for pupils from local communities has not been implemented nor monitored. In practice the policy should enable the top public school children in Cape Coast to attend the highly rated secondary schools in that city[3]. However, the policy is not being implemented for various reasons. Perhaps a more effective way for achieving equity is for schools to organise remedial classes to enable such pupils to catch up with their counterparts from private schools. Another approach is to ensure that the Universities reserve admission to at least 30 % of pupils coming from the "new" less endowed schools and who are from poorer socio-economic backgrounds but with the requisite marks.

Another approach is that instead of an allocation of 30% of available places at SSS going to the host community it should go to public school pupils. Another suggestion is to devise special scholarships in the best schools for public schools from each of the 110 districts.

The Government has declared its intention to upgrade one SSS in each district into a model SSS to provide district alternatives to the best-endowed schools and to reduce the pressure on these schools. Once the concept of the multi track second cycle education which comprises the SSS, Secondary Technical, Technical Institutes, Vocational Institutes and Apprenticeship Centres, is adopted the model school concept must embrace at least one of each type of school per district.

Gender Inequities

Inequities are also apparent in female participation across the regions. The regions with the highest incidence of poverty are the same regions experiencing the lowest participation of girls at SSS (see figure below). The Northern region has the lowest percentage of girls in SSS followed by the Upper East region. Figure 2 reveals the participation rates of SSS girls across the regions.

[3] The top 18 senior secondary schools include: Aburi Girls, Accra Academy, Achimota, Adisadel, Ghana National Cape Coast, Holy Child, Mfantsipim, Kumasi High, Opoku Ware, Pope John, Prempeh College, Presbyterian Secondary Schools, St Louis, St Peters Secondary, St Augustine, Tamale Secondary School, Wesley Girls high, Technology Secondary School.

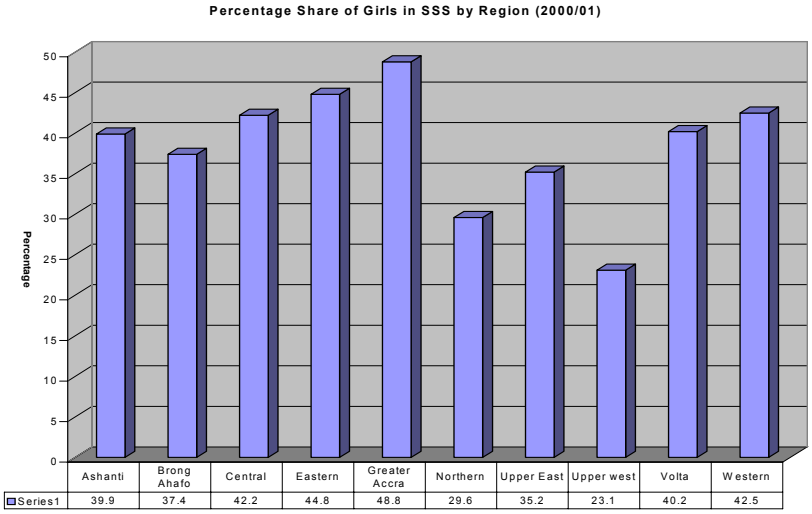


Figure 2: Percentage Share of Girls in SSS by Regions (2000/01)
(Source: SRIMPR, 2001)

Interviews with SSS girls in six of the most deprived areas of the country revealed the following problems (Casely-Hayford with Wilson, 2001):

- Lack of adequate and trained teaching staff at the school level
- Problems of retaining "trained teachers" particularly in Science, Math and English subject areas
- Lack of equipment, teaching and learning materials
- Lack of female teacher role models
- Inability of parents to provide their basic needs (i.e. panties etc)
- Poor conditions of hostel and accommodation facilities for girls

The study also found that a high level of 'transactional sex' was taking place at the SSS level due to the inability of parents to provide girls with their most basic needs (i.e. food, clothing and books). Often "sugar daddies" both within and outside the school environment would assist girls with funds to buy these items. The Development and Women Studies (1995) study on higher education also suggests that a large number of girls fall victim to sexual abuse even within the school system. The study found that teachers often make advances to girls at one stage in their school life (over 24%). These issues will be further discussed in Chapter 5.

Reasons for poor transition from JSS to SSS

Girls also find it difficult to qualify for SSS due to their poor grades in the BECE. Those who do qualify often do not get admission to the "Best" Senior Secondary Schools. The Northern Region presents other challenges, which further impede girls from transition to higher levels of education. Some of the problems faced in this region are the lack of girls' hostels and the distance between home to school, particularly at JSS and SSS levels.

Difficulty for parents in paying the Senior Secondary School fees is a problem for both boys and girls. This study also suggests problems of Senior Secondary girls in rural deprived areas of the country as follows:

- Lack of time to study due to household chores
- Lack of adequate accommodation at the SSS
- Lack of support from parents
- Sexual Harassment of girls by teachers (Sarpomaa Fiscian, 2002)

Parents and guardians often require girls to engage in household chores more than boys preventing them from much needed study time particularly at the SSS level. Lack of accommodation and proper supervision at many of the Secondary Institutions was a deterrent to parents sending girls to SSS in remote rural areas. Parents complained that they did not trust sending their girls to schools which were not supervised since it resulted in their daughters becoming pregnant (Casely-Hayford with Wilson, 2001). Sexual maturation research by FAWE (2001) also highlights the problems of unfriendly school environments, which do not have proper toilet facilities for washing and cleaning facilities for girls.

Summary, Conclusions and the Way Forward

This chapter highlighted the implications of the new content and structure of secondary school. The main observations are:

- The transition from JSS to SSS is low
- Large numbers of SSS graduates perform badly in the SSSCE
- The 3-Year SSS is not able to prepare most of these students well for the SSSCE.
- There is need to expand specialised technical, vocational and agricultural institutes to prepare more graduates of the JSS for work-related education and training
- The under-enrolled schools need special attention and transformation

The way forward is recommended as follows:

- The “new SSSs” and those considered under resourced should run 4-year programmes
- Second Cycle Education should consist of several tracks, namely, SSS General, SSS Secondary Technical, Technical Institutes, Vocational Institutes, Agricultural Institutes, Apprenticeship Training Programmes
- The under-enrolled SSS in rural communities should be provided with hostels particularly for girls and allow students to cater for their own meals.

- The 30% equity policy in the top SSS should be enforced and monitored to ensure that pupils from the public schools and from lower socio-economic backgrounds are given admission.
- 25 Equity Scholarships (President's list of scholars) should be provided to students from the public JSS's selected from each of the 110 Districts and placed in the top SSS every year.
- The Model School Concept should embrace each type of second cycle institution per district.
- Special Computing Programmes along the lines of the STME should be instituted in each district to stimulate IT education and training at the district level.
- An Open Senior Secondary School concept, which utilises radio and television, should be established to cater for the bulk of the JSS graduates outside the school system and also to provide continuing education for post SSS education and training.

2.2: Technical and Vocational Education

Technical and Vocational education and training (TVET) are recognised as necessary ingredients of any education system. Meaningful education must be holistic education. Thus effective TVET integrated with general education are essential tools for technology acquisition and industrial development for wealth creation.

Since academic skills are less expensive to impart than technical and vocational skills, expansion of education tends to focus resources on the academic programmes. The result is that many school leavers cannot be absorbed into productive employment for lack of appropriate skills. What is needed is the curriculum to impart productive skills and cultivate positive attitudes towards rural occupations and agriculture. Government social and economic policies should enable school leavers equipped with the appropriate skills to live and work in rural communities. This will require increasing access to credit and models of small-scale industry, which are relevant to the rural context.

Critics of the 1952 *Accelerated Development Plan*, argued that its implementation lowered academic standards and produced many unemployed school leavers (Dzobo, 1972). The Kwapong Committee (1967) recommended the establishment of *Continuation Schools* to teach elementary vocational trades and practical agriculture to pupils in Middle Forms 3 and 4 (i.e. nine and tenth grades) who were not in secondary schools. They also recommended that a farm institute should be established in every region to train young farmers. Indeed inadequate attention to technical and vocational education were cited as defects of Ghana's educational system which the Kwapong Educational Review Committee of 1966, the Dzobo Committee of 1973 and the 1987 Educational Reforms, all set out to correct.

The 1973 *New Structure and Content of Education* introduced the concept of the JSS as a comprehensive school for all primary school leavers. It discontinued the continuation schools, which were accused of teaching technical and vocational skills to children of ordinary people but not to elite children who attended secondary schools (Dzobo, 1987). Thus, the JSS combined basic academic skills acquisition with elementary technical and vocational skills development. However exaggerated the claims that were made for the JSS, which proclaimed the workshop as the sine qua non for that level of education, it was an attempt to re-orient an educational system which paid scant attention to TVET.

The issues and challenges facing TVET include:

- The position of TVET in Basic Education
- The role of TVET in the SSS
- Types of TVET in Post-Basic Education
- National Policy Framework on TVET

The Impact of TVET in Basic Education

The 1987 reforms stressed the teaching of technical and vocational skills as an objective of TVET in basic education. The JSS workshop was perceived as an indicator of the preparedness of a school to teach TVET. Thus, at the recent National Economic Dialogue the MOE made a commitment to ensure that all JSS's would have workshops by 2005. After 15 years of the reforms, however its critics as well as its promoters would agree that inadequate equipment, absence of workshops in many JSSs, and scarcity of well-trained TVET teachers have not promoted the development of practical skills at the JSS level.

Technical Training Centres served clusters of middle schools in the days of the continuation schools. Each JSS school is expected to have its own workshop. Currently, VOTEC centres are being developed to serve senior secondary schools. The VOTEC Centres have revived the practice of clustering schools using a single well-equipped common centre. Affordable JSS workshops may be designed for rural schools, which because of distance cannot be part of a cluster of schools.

Some stakeholders argue that too much emphasis on pre-technical and prevocational subjects is partly responsible for the poor literacy and numeracy of many JSS graduates. For example, it was argued in the *Draft TVET Policy Framework for Ghana* (2001) that:

- The pre-vocational skills could not be taught because of inadequate equipment and inadequate funds to purchase consumables;

- The effect of these programmes was to detract from valuable time, which should have been devoted to the learning of basic academic skills "which are foundational for the acquisition of scientific and technological knowledge and understanding and sustainable improvements in TVET."

Considering the poor quality of education in public basic schools and the limited time spent on teaching any subject--- the teaching of basic technical and vocational skills cannot be solely blamed for the low achievements in these schools. The large majority of pupils from the JSS who have no hope of further education need the exposure to technical and vocational skills as preparation for technical, apprenticeship or vocational training.

The practical skills included in the JSS curriculum during the reform process were to assist the educational system move away from too much emphasis on academic education. It was also considered necessary to introduce practical skills to enable the majority of JSS graduates who will not enter the SSS to develop appropriate attitudes and aptitudes towards technical and vocational careers. More research is needed to assess whether this has interfered with

the teaching of reading and writing particularly at a time when low quality permeates the primary school system.

The Impact of TVET at SSS level

The 1987 reforms made a serious effort to vocationalise secondary education by introducing a diversified curriculum into many schools. The core curriculum enabled all pupils to study basic academic subjects like English Language, Mathematics, Social Studies and Integrated Science. Three elective subjects were taken from one out of five programmes: General Arts and Science, Agriculture, Business, Technical, and Vocational. Currently, 95% of schools offer Vocational Programmes, 74% offer General Arts and Science, 39% offer Business and 29% offer Technical subjects. The number of candidates who took the SSSCE in the individual subjects is a better indicator of subject offerings at school and the preference of students. Table 17 shows this for 2001.

Table 17: Number of Candidates in SSSCE Subjects: 2001

Subject	Boys	Girls	Total
Economics	16535	14103	30638
Elective Mathematics	14794	5158	19952
Geography	7145	3815	10960
English	37856	28588	66444
Core Mathematics	37740	28553	66293
Physics	10743	3255	13998
Accounting	7466	4593	12059
Ceramics	620	287	907
General Knowledge in Art	3250	5671	9921
Picture Making	1018	624	1642
Food & Nutrition	229	5018	5247
Textiles	1638	1853	3491
Management in Living	502	6419	6921
Clothing	193	1687	1880
Technical Drawing	3393	39	3432
Electronics	40	1	41
Building Construction	1656	13	1669
Woodwork	997	7	1004
Metalwork	653	6	659
Applied Electricity	275	7	282
Auto Mechanics	196	4	200

Source: WAEC

The table reveals the clear gender differentiation within subject areas. Few girls take the technical options. The most subscribed subjects include Technical Drawing, and Building Construction. Management in Living, Clothing, Foods and Nutrition also attract reasonable number of students, mostly girls.

Improving the Quality of Technical and Vocational Training

Though reference to the subject offerings in the SSSCE show that students are indeed taking some of the technical and vocational subjects, the ESR team endorsed the view that SSS is not the most conducive environment for offering practical training. Over the years SSS has tended to only offer theoretical aspects of vocational subject matter. Studies reveal the need to provide increased support to promote Technical and Vocational Institutes as the first option for this type of training.

The majority of the new secondary technical schools lack trained TVET teachers and equipment for meaningful teaching and learning. The pioneer secondary technical school, i.e. the Ghana Secondary Technical School (GSTS) in Sekondi-Takoradi has had a huge impact on the training of engineers and technologists in the country. The model should be used and replicated to train more engineers in the future. GSTS has workshops and so is able to teach the mainstream technical subjects such as woodwork, metal work, and auto mechanics to a high standard. It also has maintained a high academic standard therefore it is able to attract good students and highly qualified teachers.

There is a strong case to equip a few of the new secondary schools to achieve very high standards in second cycle technical education along the lines pioneered by GSTS. With appropriately located Votec Centres, each region in Ghana can be served by a few of such specialist secondary schools. It is of interest that Britain, which pioneered comprehensive schools, now talks in terms of diversified secondary education, specialist secondary schools and city technology colleges.

Gender Equity in Vocational and Technical Education

Some of the main gender concerns include the very low percentage of girls entering vocational training institutes compared to boys within the country. Some of the reasons behind the lag are the lack of guidance and counselling services for girls at the JSS level and lack of financial resources to continue education after JSS. There are also fewer boarding facilities for girls compared to boys in all types of second cycle institutions including Vocational Training institutions. Many of the vocational training institutes focus their programmes on male oriented programming (woodcutting, electrical etc). Studies by Presbyterian Church of Ghana and EZE/EED suggest the need to encourage JSS girls to enter non-traditional vocational training areas. Presbyterian Church of Ghana and EZE/EED have supported a gender programme, which promotes girls' education at technical and vocational training institutes through the introduction of gender co-ordinators, counselling and scholarship programmes.

One of the main challenges in this field is to ensure that vocational training skills are suitable to the job market and the demands of rural areas. Girls are

opting for subjects, which do not provide a sustainable livelihood in many rural areas i.e. catering and dressmaking. Recent studies by the Presbyterian Church also suggests that vocational trained self employed are not making an acceptable living wage which will support themselves, their business or their families. More emphasis should be placed on linking vocational institutes with employers and the job market.

Types of Post-Basic TVET

Akplu (2002) recognises six post-basic TVET tracks:

- The informal apprenticeship system
- Formal apprenticeship (industry-based)
- Vocational Training Institutes (private and public)
- Technical Institutes
- Farm Institutes
- Senior Secondary School.

Post-Basic TVET policy must recognise the career paths the above institutions offer to JSS graduates. The results of the SSSCE suggest that many pupils in the SSS may be better off pursuing less academic programmes. Still, the demand for general secondary education will continue to increase with succeeding generations of JSS graduates unless the quality of technical and vocational training is improved. Proper career guidance and counselling will also significantly assist the JSS leaver to identify their strengths and weaknesses before pursuing higher level studies. Improving the quality of technical and vocational training will enhance the status, outlook and encourage many more JSS graduates to enter the Vocational education system. Currently, many of the new secondary schools are under-subscribed. (See Table 16 below).

TVET is offered by a large number of agencies under various sector Ministries. The GES runs 23 Technical Institutes. NACVET runs 18 months Apprenticeship Training Programmes. The Ministry of Manpower Development and Employment (MMDE) overseas the National Vocational Training Institute (NVTI), the Integrated Centres for Employable Skills (ICCES), and the Opportunities Industrialisation Centres (OIC). The Department of Social Welfare under MMDE runs a number of Vocational Training Centres and Industrial Schools. The Ministry of Local Government and Rural Development runs 18 Women's Training Institutes and 4 Centres for Rural Industries. The Ministry of Youth and Sports runs 7 Youth Leadership Training Centres. Ministry of Food and Agriculture has 4 Farm Institutes. Ministry of Trade and Industry, Ministry of Environment Science and Technology, Ministry of Tourism are all involved in training and have facilities.

Technical Institutes

Practitioners and administrators of TVET strongly argue that the Technical Institutes have suffered neglect with the reforms (Budu-Smith, 2002; Akplu, H. F. 2002, Association of Principals of Technical Institutes, 1999). Only one more technical institute has been established since the 1987 reform bringing the total to 23. Technical Institutes such as Kpandu, Kukurantumi, and Asuansi have trained many capable artisans, and technicians but are currently very poorly equipped.

As trainers of competent craftsmen, artisans and technicians for direct employment, the view of most stakeholders is that these institutes should not offer SSS subjects. If properly equipped the Technical Institutes can be linked to the informal and private sector technical and vocational training centres and the variety of apprenticeship programmes for out of school youth.

The technical institutes should also forge closer links to the private sector and industry offering these sectors input into their curriculum and training design to ensure a stronger linkage between training and the world of work. More emphasis should also be placed on the development of small to medium scale technology, which could best serve the current Ghanaian economy. This could also provide a steady income for the technical institutes if properly managed and a link to the private sector. Table 18 outlines the main type of TVET institutes, centres and programmes currently available across the country

Table 18: Overview of TVET Institutes/Centres/Programmes

Ministry/Agency	Training Institute/Centre	Remarks
MOE/GES	Technical Institutes NACVET oversees 19 Public and 22 Private Apprenticeship Training Centres	23 of them, Estimated enrolment 17256 for 2000, Admits BECE for4 Year Programmes in Crafts/Technical Subjects 3 Months Apprenticeship Training, 2 – 3 weeks for master craftsmen. Gives certificates of Participation
The Ministry of Manpower Development and Employment (MMDE)	NVTI Centres ICCES Centres, 66 of them OIC Centres, 3 Centres Department of Cooperatives, has 1 College	Admit BECE, SSSCE, Apprentices, School Dropout, and Illiterates. Awards NVTI I & II Certificates Admit BECE, School Dropouts BECE for 11 Vocational Courses
Ministry of Local Government and Rural Development	18 Women's Training Institutes;	Admit BECE and school drop-outs for NVTI Certificates & Cert. Of participation

Ministry/Agency	Training Institute/Centre	Remarks
	4 Centres for Rural Industries Department of Rural Housing runs 18 Artesian Skills Training Programmes	Admit BECE, SSSCE, School Drop outs And Illiterates for NVTI certificates. 6 – 12 weeks training, awards certificates. Of participation.
Ministry of Youth & Sports	7 Youth Leadership Training Centres	Admits BECE and School dropouts for 2 years for NVTI Certificates.
Ministry of Transport & Communication	Government Technical Training Centre, Kaneshie. Technical Centre	Admits BECE for 1 Year Awards NVTI and City & Guilds Intermediate.

Source: Amankrah J. Y. Ministry of Manpower Development and Employment

Post-Basic Apprenticeship Training Programmes

Rationalization of apprenticeship training is urgently needed to provide recognised career opportunities for the large number of post-basic school pupils who according to Akplu "disappear silently into the informal sector." More research is needed to identify the problems in securing a sustainable livelihood once post-basic apprenticeship is completed. Vocational and Technical education should ensure that entrepreneurial programmes are effective in supporting graduates with viable self-employment training.

Yet, there is no shortage of organisations which if properly co-ordinated can offer the certification and the linkages with the formal TVET sector and the world of work. What is needed is a greater level of cooperation between the many agencies and sector ministries, which operate TVET centres and colleges. Table 19 describes the key stakeholders involved in monitoring and coordinating TVET in Ghana.

Table 19: Key Stakeholder monitoring and coordinating TVET in Ghana.

NACVET	➢ The National Co-ordinating Committee for Technical and Vocational Education and Training, was established in 1990 to address the problems associated with the disorganized and fragmented manner in which technical and vocational education and training was administered in the country;
NVTI	➢ the National Vocational Training Institute (NVTI), was established in 1967 to coordinate at the national level all aspects of vocational training including apprenticeship. The institute to this end has developed criteria for recognising and registering private vocational institutes in the country, which includes trainees on roll, premises, instructor/trainee ratio, qualifications of instructors and supporting staff. NVTI has strayed a bit from its coordinating role into becoming a trainer itself, currently running 29

	vocational institutes (Boateng, M 2002)
Advocacy Group on TVET,	➢ Is a churches group, whose core members are the Catholic Church, the Methodist Church, the Anglican Church, the E.P. Church of Ghana, the Christian Council of Ghana, and the Presbyterian Church of Ghana.

Improved coordination between and within these bodies will be ensured through the National Policy Framework on TVET is currently before Parliament. The Policy framework will help to ensure that private and public participation within the TVET sub-sector is properly regulated. Two major reports on TVET which require serious consideration by the MOE are:

- The Study for Development of a Master Plan to Strengthen Technical Education in the Republic of Ghana
- Draft TVET Policy Framework for Ghana.

Three recommendations emanate from these reports. They are:

- The establishment of a **Council for Technical and Vocational Education** and Training (COTVET) to coordinate all aspects of TVET (in school and out–of–school). All the sector ministries which have agencies in TVET would serve on COTVET;

- The establishment of a **National Qualification Framework** to address vertical and horizontal articulation difficulties to smoothen career progression and harmonization of qualifications within the TVET sub sector;

- Establishing a **Skills Development Fund** to diversify funding sources and increase funding for TVET.

2.3 The Way Forward for TVET

The ESR Team recommends early parliamentary approval for the national policy framework for TVET development in Ghana. The MOE should actively cooperate with all sector ministries which offer TVET through COTVET to smoothen post-basic and post-SSS and further training opportunities. Trained counsellors at the JSS and SSS level should be recruited to ensure that students are properly oriented based on their inclination, skills and aptitudes.

- The need for more specialised Technical and Vocational Institutes is great. It is recommended that each district should have one well-equipped and properly resourced institute for TVET education and training. Such institutes in addition to the Model Senior Secondary Schools may be a solution to the

large number of SSS students who perform rather poorly in the SSSCE and yet have no opportunity to learn technical and vocational skills.

- A greater problem for Ghana is how to minimise youth unemployment by creating apprenticeship-training programmes for the larger number of post-JSS and post-SSS pupils who would not be in Technical and Vocational Institutes. Presently many of them migrate from rural areas to look for jobs in the urban areas. The Government's role should be to work in partnership with the private sector operators, industry and the churches that provide most of the training in the sector, especially in the area of standardisation and certification.

- A matter of great concern is that very few TVET programmes focus on agriculture, which is the main basis on which Ghana's GDP depends. More research is needed to understand why agricultural production is not creating job opportunities for school leavers.

The issue of relevance is very important in the vocational/technical institutions, as the training offered by them should have the effect of enabling the trainees to become self-employed. If what they are being taught are not needed in their own environment then they would have to join the army of job seekers looking for jobs, which are rather scarce. Another issue is the proper equipping of the institutions to help them make the training practical. Related to this is the need for careful planning by the institution's authorities of the scheme for attachment of the students/trainees and for monitoring them when they are on these attachments.

The education sector needs to work out plans, rules and regulations for apprenticeship and attachments. Such a scheme should encompass the obligations of parents, heads of companies and trainees who opt for apprenticeship or other non-formal training in such companies to acquire skills.

MOE and the MMDE, while considering TVET as a necessary component to creating opportunities for self-employment in the informal sector should also consider the availability of educated and skilled youth as a tremendous resource for investors in agriculture and industry in rural Ghana. With rural electrification, educated and skilled youth can be trained to spur on the industrial and agricultural development with the proper orientation and support. This would significantly enhance the rural sector and agriculture production in Ghana. A prosperous rural community would demand basic education as a matter of right and would support higher quality secondary education. Self-employment and entrepreneurship are important components in any developing economy but education and training to produce skilled manpower as a resource for investment may well be a better development objective.

The ESR team recognised the critical role for high quality academic education at the Senior Secondary level and technical institutes level particularly in an

economy, which is low income, and struggling to become a global player. Ghana's future will depend on the level to which it can improve the quality of basic and second cycle education. This process will both attract global industry and create a new entrepreneurial class capable of carrying forward the new vision of government--- the golden age of business. The ESR team recognised the importance of opening up opportunity for increased equity in the Ghanaian education system---it also recognised that the primary steps should include an important focus on achieving higher levels of quality in the system.

2.4 Management and Finance Issues in Second Cycle Institutions

The earlier comments about inadequacies of infrastructure, of staff and other resources are applicable at this level also (see section 1.5).

A GES official who attains the rank of Assistant Director becomes eligible to head a senior secondary school if he/she holds a university degree. It is expected that after selection and before he/she assumes duty as Headmaster/mistress of the school concerned, he/she would have been given some training in management. This in many cases remains a wish and he/she is left to run the institution as best as he/she can. External assistance tends to take some time in coming as inspection of such a school can be done mostly from Accra or at best from the regional office. Mistakes may, therefore, take some time to correct. The reason why such inspections cannot be done from the district education office is the calibre of the staff at that office as Assistant Directors posted to many rural districts are non-graduates while Regional offices have more than their approved establishment for Assistant Directors most of whom are usually graduates. The strengthening of the District offices of Education is very essential.

Financing

The financing of secondary education (second cycle) is quite different to that of basic. Most senior secondary schools (97%) are public, they charge no fees for the general operation of the school, but only for specific services, such as textbook user fee, PTAs levy, sport levy, cultural levy, library, etc. The most important charge is the boarding cost when the student cannot commute every day to his/her family home a relatively frequent case in Ghana due to the selection process for admission. One can estimate that a student who is boarded has to pay 2.5 million cedis per year, except when he has a scholarship.

Public funding for three types of resources support secondary education: the MOE's budget, the GETFund, and the Scholarship Secretariat. Within the MOE, the share of secondary is about 11.6%, but when other public resources are included, the share of secondary is 14.0%. This increase is due to the funding from the GET Fund, which is relatively favourable to secondary

education (31.4% of the GET Fund resources, as decided by Parliament). Unit costs from public sources amounts to 1,664,702 cedis in 2001, or 84% of the GDP per capita. This is quite different from junior secondary where the unit cost is only 28% of the GDP. When compared to international standards, it appears that junior secondary is close to the average cost in the group of Least Developed Countries (29%) while senior secondary is about three times more costly than in the reference group. When boarding costs are included, total unit costs in public secondary schools represent more than twice the GDP per capita, namely seven times the unit cost in comparable countries. Unit cost in private secondary schools are much lower. They amount to slightly more than 1 million cedis, or half the GDP per capita, boarding cost not included.
Very few educational systems in the world are relying so extensively on boarding facilities for secondary students. It is usually utilised by rural students who live far from the nearest secondary school, but it is exceptional to board urban students, except in Ghana.

Scholarships are aimed at helping families to cover boarding costs, as far as there are no fees. Three groups of students are eligible for a scholarship those from:

- The three Northern regions and from 10 districts in both the Volta region and the Central region (about 2000 every year)
- Students who achieve well (previously the two best students in each subject in a given school, and presently the best 4 students, thanks to additional funding from the GET fund)
- Finally, students who are facing specific economic constraints, such as students with a single parent, students who are orphans or students who have already brothers and/or sisters in secondary education. By far the highest number of scholarships is allocated on merit, not on social reasons.

Much more work is needed to ensure proper targeting of these scholarship funds to the neediest groups particularly when they are going directed at “boarding schools” which often attract children from higher social and economic backgrounds (i.e. northern Scholarship scheme). Scholarship funds should be allocated on a need basis and not provided to schools simply based on their location.

CHAPTER 3: TERTIARY EDUCATION

3.1 Introduction

One significant outcome of the 1987 educational reforms was the categorization of tertiary level as comprising universities, polytechnics, and professional post-secondary institutions. A University Rationalisation Committee (URC) was constituted in 1988 to propose a review of higher education as a follow-up to the ongoing reforms in pre-tertiary education.

The recommendations of the URC were embodied in the *White Paper: Reforms to the Tertiary Education System: 1991.* Access and participation in tertiary education was increased with the elevation of polytechnics into tertiary institutions and the establishment of two university institutions, the University of Development Studies (in the North) and the University College of Education (at Winneba).

A **National Council for Tertiary Education (NCTE)** was established in 1993 to assume the functions of the National Council of Higher Education[4], which linked the universities to the Ministry of Education. An important proposal, yet to materialise is the bringing together of teacher training colleges, and a number of post-secondary middle level professional institutions, run by other sector Ministries, to form Regional Colleges of Applied Arts, Science and Technology (RECAAST) as a another segment of Tertiary Education.

The Senior Secondary School Certificate Examination (SSSCE) replaced the "O" and "A" levels as the matriculation requirement for universities and other post-secondary institutions. Catering for just about 3% of the age group, admission into tertiary institutions is highly competitive. As the analyses of the CRT, BECE, and SSSCE, in previous chapters have shown, pupils in public schools, especially in rural communities, have limited opportunities to enter the better-endowed senior secondary schools, which produce the best SSSCE results for University admission. Access and participation have increased at the university level but not enough to end the frustration of the many who seek university education.

Other recognised tertiary educational institutions, which could reduce the pressure on university admissions are the:

- Polytechnics
- Institute of Professional Studies (IPS)
- Ghana Institute of Journalism (GIJ)
- Ghana Institute of Languages

[4] PNDC Law 42 abolished the National Council for Higher Education (NCHE) together with the Ghana Education Service Council in 1983. The functions of the NCHE were assumed by the then Minister of Education and Culture who was assisted by a Deputy Secretary for Higher Education

- National Institute of Film and Television (NAFTI)

In addition to these institutions are the teacher training colleges, and the middle level professional colleges that are run by other sector ministries. These are the institutes, which were designated *as Regional Colleges of Arts, Science and Technology (RECAAST) in* the White Paper on Tertiary Education Reforms. These are:

- Teacher Training Colleges
- Nurses Training Colleges under the Ministry of Health
- Agricultural Colleges, and the Pong Tamale Veterinary College, under the Ministry of Agriculture
- Forestry School, Sunyani, under the Ministry of Lands and Forestry.

In terms of access and participation there has been a phenomenal growth in the enrolments at the University of Ghana, the Kwame Nkrumah University of Science and Technology, and the University of Cape Coast--- the three older universities. The implementation of an admissions policy, which decoupled admissions from the provision of residential accommodation, has brought about significant change within the sector.

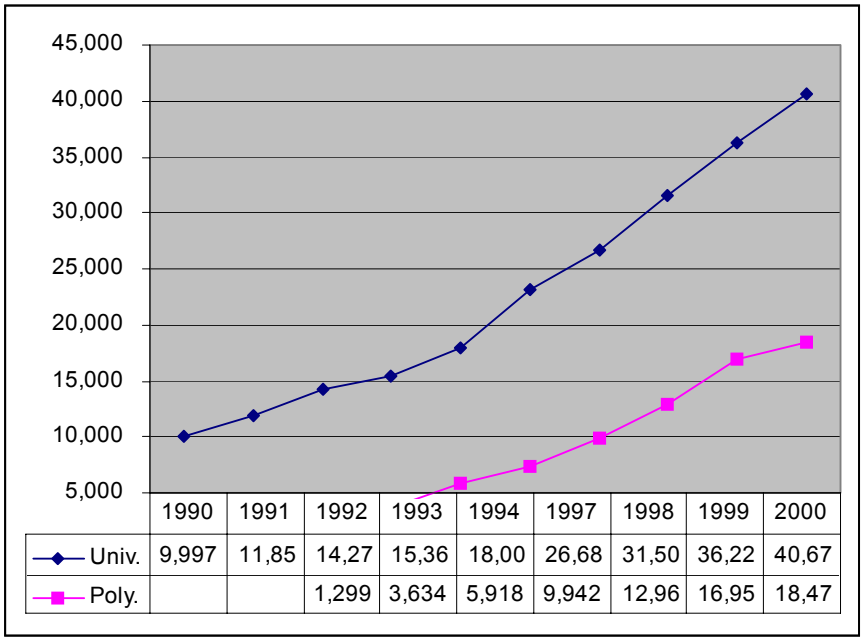
The growth in admissions has stretched academic facilities to the point of impacting on the quality of academic standards. The education reforms attempted to provide for quality assurance in tertiary education by establishing the **National Accreditation Board** (NAB) in 1993. The role of the NAB was to monitor the quality of teaching and learning in all programmes offered by the tertiary institutions, including private institutions.

A complementary body to the NAB is the **National Board for Professional and Technician Examinations (NABPTEX),** whose role is to formulate and administer examinations, assessments, and certification for the polytechnics. Without proper resourcing NABPTEX has not been able to discharge its responsibilities so the polytechnics have assumed full responsibility of their examinations and certification.

Access and Participation at Tertiary Level

Figure 3 shows the growth in enrolments in the universities and polytechnics for the period 1990/1991 to 2000/2001. Enrolments data on the universities and polytechnics are readily available but not for other tertiary institutions.

Figure 3: Universities' and Polytechnics' Enrolment 1990 to 2001



	1990	1991	1992	1993	1994	1997	1998	1999	2000
Univ.	9,997	11,85	14,27	15,36	18,00	26,68	31,50	36,22	40,67
Poly.			1,299	3,634	5,918	9,942	12,96	16,95	18,47

(Source: National Council for Tertiary Education, 2002)

The reform process has been able to increase access to tertiary level education. Universities increased enrolments by about 4 fold from 1990 to 2001. Since the reforms the polytechnics increased their enrolment from 1299 to 18474 between 1990/91 and 2000/2001-- a growth of 14 fold. Prior to the reforms the polytechnics were administered as advanced second cycle technical institutes by the GES.

The growth in enrolment in universities was registered mainly in the older universities such as the University of Ghana, the Kwame Nkrumah University of Science and Technology, and the University of Cape Coast. The University of Development Studies (UDS) in the North has not grown much since it began in 1992. This is mainly due to under-resourcing and lack of funds. There are prospects that new sources of funds promised by government may change the situation in the near future for UDS.

In response to the specific terms of reference for the ESR team, the rest of the chapter will selectively look at (i) the provision of opportunity for specific types of tertiary education and (ii) alternative modes for providing tertiary education such as distance education. The potential of distance education for teacher education will be discussed in some detail in view of the high attrition rate of teachers and the high cost of teachers' study leave payments to the Ministry of Education and the GES. Finally an Open College system of Community Colleges is proposed to create more space and opportunity for youth in the country through the use of Information Technology (IT). It is proposed that the Open College System will provide education and training in

work-related skills for the large numbers of post-JSS and post-SSS graduates who are not enrolled in conventional colleges.

3.2 Equity at the Tertiary Level: Who Goes to University?

The stiff competition for admission is such that only the highest achievers have any hope of entering the universities. This number cannot be estimated readily from analyses of the SSSCE results that WAEC presents to the Ministry of Education each year. The universities stipulate that applicants must obtain a minimum aggregate[5] of twenty-four (24) to qualify for University admission.

The University of Ghana insists on passes in core Mathematics and core English Language; it is not likely that a candidate who obtains a grade lower than C in any of the two subjects will gain admission. Table 20 represents SSSCE passes for the 2000 and 2001. The estimates provide an overview of the numbers competing for places if performance in English and Mathematics were used as an indices.

Table 20: Number of SSSCE passes at Grades A to C in Mathematics and English

Subject	Total SSSCE	Grade A	Grade B	Grades A & B	Grade C	Grades A, B & C
Core Mathematics						
2000	62414	4979	7155	11,134	4468	15,602
2001	66293	4397	5764	10,161	4043	14,204
Core English Language						
2000	65,528	437	3610	4047	4498	8,545
2001	66,444	583	4110	4693	5020	9,713

The results of the CRT, the BECE and the SSSCE all point in one direction. Pupils who are admitted in the best-endowed senior secondary schools are most often from private primary schools. The better-endowed SSS's are the schools, which obtain the best SSSCE grades and whose pupils will be admitted into the most preferred courses at the universities. There is a case for upgrading facilities in selected district SSS schools as proposed by the government but the question remains whether increased equity can be solved through this process? The ESR team has devised an equity formula for ensuring that 30% of places at the public Universities are reserved for the under endowed SSS schools for achievers.

[5] The best grade in a subject is an "A" equivalent to a numerical grade of 1. The lowest pass is an "E" or 6. A Grade D or 4 in each of six subjects earns aggregate 24. The University of Ghana insists on the six subjects being Core English Language, Core Mathematics, Core Science, and three appropriate elective subjects, depending on choice of discipline. With a cut-off aggregate of 12 for Science for admission in 2002, a successful applicant requires an average grade of 2 or B in each of six subjects. If the cut-off aggregate is 9 or less such an applicant should average nothing less than mainly A grades with one B.

The outgoing Vice-Chancellor of the University of Ghana has stated that 18 out of the 474 SSS contribute 50% of the intake into the most desired courses at Legon and Kumasi Universities. The CRT, the BECE and the SSSCE provide evidence that with the poor state of many public basic and senior secondary schools, the outcome is that university intake is largely determined by the circumstances of birth, geographical location, and family circumstances. The country is therefore unable to ensure an open and fair system of admissions to all applications and there is need for equity considerations in admissions into our tertiary institutions.

Gender research also suggests that only 25% of the University Populations is female despite the 50:50 targets[6]. Interviews with the National Council on Tertiary Education (NCTE) suggest that most Universities are not enforcing this proposal and complain that they are unable to attract more females at the tertiary level (see chapter 5 for details).

The Limitations when Opting for Technical and Vocational electives at Tertiary Level

The universities made it clear in 1994 after the first batch of SSS graduates were available, that they do not regard the agriculture electives' suitable for admission into the B.Sc. Agriculture degree programme. They prefer the science electives to General Agriculture, Horticulture and Agricultural Economics. They believe that those subjects are more suitable for vocational agriculture, which is taught by the Agricultural Colleges. Since then the Educational Reforms Review Committee (ERRC) has enabled General Agriculture to be taken jointly with Chemistry and Physics to increase the admission chances for students who opt for the Agriculture option. This decision disregards the fact that the Agriculture Option at SSS was designed mainly for the newer schools, which have no science laboratories to study the three science subjects (i.e., Physics, Chemistry and Biology).

Kwame Nkrumah University offers limited places for students who opt for the Technical and Vocational Electives at SSS. Some University degree programmes allow these students admission. These are:

- BA (Art) which requires entrants to obtain three SSS core subjects, English, Mathematics and Science, and passes in three SSS Visual Art Electives (Picture Making, Basketry, Ceramics, Graphic Design, Leatherwork, Sculpture, Metalwork and Textiles);

- BSc. Engineering will allow entrants to have Applied Electricity or Electronics to substitute for Chemistry;

- B.Sc. Design requires three SSS core subjects, English, Mathematics and Science, and passes in Technical and Visual Art Electives.

[6] The Government's White paper on Tertiary Education Reform (1991) states that the target for admission and retention is 50% male and 50% female, yet few strategies have been put in place to ensure this objective is achieved (National Council for Tertiary Education, 1998).

- B.Sc. Building Technology requires the three SSS core subjects are passed, and passes in the Technical Electives.

- B.Sc. in Planning requires the three SSS core subjects as above and passes in Business, Technical or Visual Art Electives.

Unfortunately most students are not aware of this basic information when they apply for SSS. The reform process has significantly increases the numbers of science students who qualify to enter University (refer to Table 10).

Who enters the Polytechnics?

The Technical Committee on Polytechnic Education (NCTE, 2001) does not accept that secondary/technical schools offer the appropriate course preparation for polytechnic education. The committee said in its report that:

> *"The Committee is of the view that it is important to restructure the educational system by developing and strengthening secondary/technical institutions in order to feed the polytechnics with the right calibre of students. What is being proposed here are unique technical institutions (not the present existing secondary /technical institutions) that would admit JSS graduates? Such technical institutions will then run programmes with suitable technical content leading to an ordinary National Diploma. The graduates with the OND will then constitute the main candidates for the HND programme. Government, the Ghana Education Service and the NCTE should take this matter up."*

The committee raised a more fundamental issue, which is that a large number of polytechnic students do not have the interest in polytechnic programmes because university education is their first choice. They consider this issue as a cause of frustration among many HND graduates who would prefer to enter universities. The same problems exist within the teacher training colleges where entrants are only marking time before they gain admission to the University and then opt out of teaching (see next section).

The above issues should be better handled by appropriate guidance and counselling services at the basic and senior secondary level which assist students identify their career options and aptitudes along with the correct labour market information. Mass media should be used more effectively by MOE to inform and educate parents and students on career options.

Gender issues at the tertiary level

One of the main factors at polytechnic level is the low percentage of females in polytechnic institutions in Ghana. Less than 22% of polytechnic entrants are

female. Participation rates of girls at Universities has improved over the last five years but still remains low. The participation rates of girls moved from 22.83% in 1996/97 to 26.83% in 2000/2001. Despite the equity policies at the University (50:50) there are very few mechanisms to ensure the enforcement of these targets. More monitoring and supervisory work is required to enforce gender targets and policies at the tertiary level institutions.

Urban girls from high socio-economic status often have easier access to university education compared to their rural counterparts due to the quality of the institutions sending them; the traditional barriers and socio-economic constraints also play a role (Addae-Mensah, 2002). More research is necessary to explore the types of girls entering higher levels of education according to region, rural/urban breakdown and socio-economic status.

3.3 Distance Education and Teacher Education

Working and studying for higher academic qualifications is not new to Ghana. Indeed a large number of Ghanaian teachers, and professionals in the immediate past took various correspondence courses while actively working to obtain their GCE "O" level and "A" level passes which qualified them to enter Ghanaian and British universities. The more popular programmes were those of the Rapid Results College (RRC), Wolseley Hall, and Pitman's College, as well as City and Guilds of the United Kingdom. The Institute of Adult Education of the University of Ghana used to run vibrant Workers' College programmes, which taught courses for the "O" and "A" levels. When the University of Cape Coast started, about a third of its student body was made up of teachers, who had taken "O" and "A" level examinations while at post and were more mature on entrance to the University.

The strongest case for moving towards tertiary distance education is in the following areas:

- To reduce the high cost of study leave which takes a large number of teachers from the classroom every year, away from their jobs, and at great cost to the GES. It is not surprising that the Open University in the UK, was patronised largely by teachers when it started. They gave it credibility and demonstrated to doubting academics that it could be viable and it had a ready constituency. Ghana is in a similar position that the UK was in about thirty years ago.
- Two-thirds of the JSS graduates and the 70% of the SSS whose formal education ends every year would cherish opportunities to improve their academic and professional standing; many SSS graduates continuously study until they "better their grades" often several years after leaving school;
- The expensive foreign executive MBA programmes offered by GIMPA and the local equivalent run by the School of Administration, University of Ghana, are very popular, and have proved that many

Ghanaians are prepared to pay to obtain higher degrees to improve their academic and social standing.

University of Cape Coast and the University College of Education, Winneba, have made modest beginnings with distance education for post diploma programmes to enable teachers at post to obtain B.ED degrees.

The UCC programmes cater for the following:

- Diploma in Education
- Post-diploma Degree in Basic Education
- Master's degree in Basic Education Administration and Management

The first programme in distance education offered by UCC was launched in October 2001 with 750 basic schoolteachers. The programme has become an instant success with over 3000 applicants seeking entry in October, 2002. UCC also runs long vacation classes for the postgraduate diplomas in education for first-degree holders who wish to obtain a professional teacher's diploma. UCC has established a Centre for Continuing Education to run its distance education programmes.

The University College of Education, Winneba, began a post-diploma education degree programme by distance in 1998. Although the programme targeted tutors from training colleges, applicants came from schools and offices of the GES. Out of the 196 who first enrolled in the programme 136 graduated in July 2002. In February 2002 over 1093 students enrolled in the distance education programme, which reveals a significant increase in demand. An extension wing of the college runs the distance education programmes of UCEW; the Institute of Educational Development and Extension (IEDE). It has trained writers and editors to develop course materials.

The way forward for distance teacher education is to bring the programmes of UCEW and UCC together in a national Open College for Distance Teacher Education with branches at each college. The Ministry of Education can fund this cooperative arrangement.

The President's Special Initiative in Distance Learning (PSI-DL)

The President's Special Initiative on Distance Learning (PSI-DL) launched on 30th of April 2002 is planning to implement a Pilot Project on Open College and Distance Learning. The programme will involve the following:

- A Basic Education programme to provide quality teaching in English (Reading, Spoken and Written) and Mathematics to children in primary and JSS. The programme will also target children who are out of school.

- A Senior Secondary School programme for products of the JSS who are not enrolled in SSS, and SSS leavers who wish to rewrite the SSSCE in specific subjects. Thus a full-blown SSS would eventually be run on television and radio for post JSS students, and will also serve as a remedial programme for SSS students.

- A Post-JSS Open College that would run technical and professional education and training courses for products of the JSS and SSS to prepare them for careers in business, commerce and industry.

- A Teacher Education programme will target teachers in teacher-training colleges and in the field. This programme will enhance the distance education programmes of the University College of Education, Winneba (UCEW), which is currently print-based.

The PSI-DL is the joint responsibility of the Ministry of Education and Ministry of Information and promises to significantly open opportunities for those who may not get a place in formal schools and higher levels of learning.

Agricultural education

The ESR team found that the MOE must take agricultural education much more seriously, which involves building a closer relationship with the Ministry of Food and Agriculture. Ghana is predominantly an agricultural country, and agriculture still forms the largest share of its GDP. Ghanaian agriculture, however, does not appear to have been influenced much by education and training for agriculture as a business. The undeveloped state of the nation's agricultural colleges provides a good illustration of this. The five post-secondary agricultural colleges have a collective intake of 250 students per year. SSS students in the agricultural option are not easily persuaded that there is great future in agriculture as a profession and a career option. The attention of the government and the Ministry of Education must be drawn to this anomaly.

Open Community Colleges

The President's Committee on Review of the Educational Reforms accepted a proposal to establish an Open Community Colleges in each district assembly area to cater for education and training for products of the JSS and SSS who are not in formal education. These colleges will not require formal admission requirements to allow for remedial programmes as well as work-related skills training.

3.4 Management and Finance of the Tertiary Sector

The phenomenon of limited capacity in performing managerial roles in the education sector includes the tertiary institutions. For instance, Vice Chancellors of Universities and the heads of departments under them are

normally selected for those posts because of their prowess in the academic field. The nature of the new jobs they get pushed into is normally new to them and they are not jobs they have been prepared for by education or experience. As no programme for an induction course in management is normally planned, they are forced to muddle through or use precedents. Some have been good leaders but the number who have had problems are many more. A short programme in management before the assumption of responsibilities of the new posts would have been useful to at least the large majority of these heads. The NCTE has started to orient new heads of tertiary institutions including polytechnics and Universities.

Several studies confirm that female participation in educational management is very low (Akyeampong, 2000; Davies 1992). The situation is often related to poor attainment in education, low professional status of women and discrimination. See annex 17 for gender disaggregated management issues.

Female academic staff occupied on average 13% of teaching positions in the 1990's in the three oldest Universities compared to 9% in the 1980's and 9% in the 1970's and 11% in the 1960's (Prah, 2002). Recent studies by Prah suggest that women occupy only 10% of UCC teaching posts. Only 10.53% of heads of TTCs are women. Some of the key recommendations from the ESR suggest that there is an urgent need to ensure that affirmative action policies are implemented within tertiary institutions including teacher-training colleges.

Finance

There is a significant difference between the share of tertiary education within the MOE's budget and its share within total public expenditure, respectively 11.4% and 18.6%. This difference is due to two factors, namely the large share of tertiary within the GETFund, and the Student loan scheme, for which the state budget is supposed to pay the difference between the Treasury Bill rate (currently 24%), and the interest rate paid by students (currently 10%). The Student loan scheme is operated by the Social Security National Insurance Trust (SSNIT), which has supported it from its creation in 1989. The state contribution has been only marginally paid (about 1.6% of its obligation), and de facto, the burden has been left to SSNIT. However, since 2000, the GETFund has transferred about 120 billions to SSNIT. Unfortunately, the status of these transfers has not been yet clarified: is it an advance for the 174 billions of arrears in the interests due by the State, or is it an advance for covering the cost of new loans currently contracted by the students (about 80 billions per year)? As long as no formal decision is taken, the SSNIT continues to include in its books the interests due, and the State debt towards the SSNIT is still increasing.

In spite of the willingness of university authorities to charge more significant fees, it has not been possible yet to introduce a serious cost-recovery mechanism at the tertiary level, with the noticeable exception of admission fees for freshmen. In addition fees are charged to foreign students and to sponsored part-time students in polytechnics. Actually, fees constitute

presently about 15% of total university revenues and 17% of polytechnics revenues. Altogether they represent about 26 billion cedis.

The development of a private universities has started only recently. An accreditation board has been set up, and about 6000 students are presently enrolled in private universities. The average fee charged in private universities can be estimated at about 8 millions cedis, with a large variability around this value. That means that about 48 billions cedis are supported by households for the operation of private universities.

The last two important projects for tertiary education have been negotiated in 1993, respectively with the World Bank (45 million dollars), and the African Development Bank (20 millions dollars). These two projects are presently closed, and no new one has been signed yet.

Summary of funding by sources

The share of public funding at the tertiary level is 85%, while the share of private funding is only 15%. It is far different from basic education, where public funding is less than 50%, while private funding accounts for 39% and donor funding for the rest. Such a funding pattern can be qualified as regressive from a redistribution point of view, because the socio-economic background of students at the tertiary level is strongly biased in favour of the highest socio-economic segments of the population. It is fair to add that most of the private funding at the basic level is provided by better off families, but it is aimed at generating a quasi-monopolistic access to senior secondary and tertiary education. Such a funding pattern leads to two types of recommendations, namely higher fees for senior secondary and tertiary education, and targeted scholarships for the poor at both levels.

3.5 The Way Forward for Tertiary Education

- Technical and Vocational Institutes must be developed to provide a stronger base for polytechnic education which is more practical and vocation in orientation
- Distance Learning offers opportunity to cater for the majority of Ghanaian youth who will not be in formal education after the JSS and SSS;
- Open Community Colleges must be established by district assemblies to provide education and training for local industry;
- The Agricultural Colleges must be upgraded to train manpower for agri-business as envisaged by the government;
- Equity considerations through a 30% quota arrangement must be introduced into university admissions in order to increase the number of women and youth from the rural deprived areas of the country. SNITT loans should be targeted at students who are in need based on socio-economic background.

- Special Funds should also be available in the form of student loans to promote polytechnic and vocational options particularly for girls wanting to enter these institutions.
- Special arrangements should be made to ensure gender equity and affirmative action policy's are introduced and monitored to increase the number and promotion of female teachers and administrators at the tertiary level.
- All professional degrees obtained from public universities at the cost of the state must attract a minimum period of bonding (i.e. three years).

The MOE should support publicly funded Universities to run a two-stream programme, which encourages private fee paying students along side publicly, supported students. More autonomy is required for the Universities to experiment with this process which has already begun at the University of Ghana and the Kwame Nkrumah University of Science and Technology (UST). More research is needed to study the models, which have been emerging in East Africa (i.e. Uganda). The ESR team reviewed some of the initiatives of private university programmes and sees great potential in the complementary roles these institutions will play[7]. They also offer a significant challenge in quality and innovation to the long-standing public universities.

[7] There are currently five private Universities: Central University College, Valley View University, the Methodist University College, Ashesi University and Islamic University.

CHAPTER FOUR: TEACHER EDUCATION AND DEVELOPMENT

4.1 Introduction

This chapter provides a brief analysis of the available evidence concerning the teaching profession – the challenges, the policies, which need enactment of development in relation to teacher supply and demand, and the available evidence for improving the quality of teachers' classroom work and the impact this has on student learning and achievement. The final section will provide a summary of the key problems confronting teaching as a profession in Ghana and the important key steps to improve it.

The Human Resource Situation in Teaching

Trend analysis of the human resource situation in teaching at primary and JSS levels reveals that since 1987 the PTRs (pupil/teacher ratios) at both the primary and JSS levels have increased from 25.7:1 to 35.9:1 and from 18.7 to 20:1. Primary school ratios have deteriorated significantly for the following reasons:

- The output from the training colleges has not been sufficient to balance attrition and expansion of school enrolment;
- Teachers are resisting postings to rural areas;
- Majority of rural teachers are " untrained" pupil teachers who have been in the service for a long time.
- Teachers often leave the teaching profession for better-paid jobs in the private sector and in NGOs (Akyeampong et. al., 2000)

Examination of data on teacher supply in both public and private schools allow the following conclusions:

- More teachers must be produced so that the pupil teacher ratios (PTRs) do not increase, and more trained teachers can be sent to rural deprived communities.

- Teacher Training Colleges produce 6000 new teachers annually. Analysis of teacher demand for 1998 indicated that about 9,100 new teachers are required, giving a shortfall of about 3,100. About 3,500 'untrained' teachers are also recruited annually who require more systematic training in the form of modular programmes during vacation time.

- The magnitude of increases needed to meet demand is substantial. About two-thirds of current output of training colleges is required annually at the current GER to cover the demand generated by population growth, high levels of attrition, and reduced dropout.

- To achieve universal access of 100% enrolment will require increases of enrolment -- three to four times the current output of training colleges. We therefore have to reconsider a more practical, realistic and relevant approach to teacher training and recruitment.

- We need to consider more radical alternatives to train greater numbers of teachers. Distance education offers one alternative. Our training colleges are empty half of the time. A flexible system of training during vacations is possible. Currently the Institute of Education at the University of Cape Coast organises evening classes for teachers.

- The ESR team is proposing the introduction of a large-scale recruitment drive for "pupil" teachers to serve in rural deprived areas (where they are needed most) and introducing a system of OUT OUT IN. Two years in the teaching field with modular training during vacation time and one year in the training college (the third year) for those who perform well.

Declining Supply of Female teachers

The key gender issues within Teacher Education and Management concern the low participation rate of females at TTC's (39%) and the declining rate of female enrolment at TTC's over the last few years (2.9% decline between 1997 and 2000). Other gender issues concern the low percentage of female academic staff in the three oldest Universities (13%) and the low percentage of women as heads of Teacher Training Colleges (10.53%).

The growth in numbers of female teachers is slightly lower than that of male teachers – about 4% growth rate. Since the 1987 Education Reforms the average yearly growth of trained teachers is about 4.5% and untrained teachers have reduced at a similar rate of 4.3%. However, female untrained teachers have declined at a faster rate than that of males (-14.22).

At the JSS level the number of both trained and untrained male teachers have been growing at about 7.6% and 6.7% respectively. The story appears different for female JSS teachers – the growth rate for trained female teachers is very low (0.63%). Female untrained teachers have been reducing at a rate of about 7.2% per year. This indicates a serious problem in female education and orientation to teaching as a profession.

The rates of female completion are also declining at training college. Out of a total teacher education intake in 1997/98 only 39.1 % were women and in 1999/2000 only 36.9% were women. Female entrants to teacher training colleges declined by 2.9% between 1997/98 and 1999/2000.

Low levels of female participation and declining rates of female enrolment at teacher training college are due to the:

- Poor performance of girls at SSS and their inability to qualify for teacher training particularly from rural deprived areas. This is mostly a cause of poor math and science scores in the SSSCE.

- Poor quality of SSS in deprived rural areas accounted for some of the reasons for poor performance of girls (lack of facilities, teachers etc) in the SSSCE.
- New entry requirements at TTC's for science subjects (no longer elective science subjects accepted such as agriculture)
- Girls preference for other professions such as nursing, secretary-ship and business
- Lack of guidance for girls entering SSS in terms of course requirements for entering teacher training collages and lack of encouragement by parents to enter the profession.

Other Key Gender Issues: Deployment

The other major gender issues in the teaching profession relate to deployment and the difficulty in getting role models for girls in rural deprived areas of the country. A large percentage of female teachers are working in Accra and in the major regional centres. Studies suggest a very low percentage of women serve in districts where girls' enrolment is very low. For instance, the Greater Accra teaching force is composed of as many as 83.6% females while the Brong Ahafo and Northern region have only 23.9% and 24.8% female teachers respectively in their regions. There are also a number of female teachers who have been moved to the kindergarten level since the new policy to remove pupil teachers from the system came into effect.

Regional Variation in Pupil Teacher Ratio for Primary and JSS

The national recommended pupil teacher ratio has been given as 46:1 for primary school and 24:1 for JSS (MOE/GES, 1999). As at 1997/98 the national PTR stood as 35.9 for primary and 20.0 for JSS. Nine regions, with the exception of Greater Accra have a PTR of about 35.0. It is only Greater Accra that seems to have primary PTR (43.7) closer to the desired national ratio. For JSS, its PTR (24.6) exceeds the desired national ratio (see appendix 1 & 2). The data suggests we have achieved a bigger change in PTR for primary (about 40%) than for JSS where the change is about 6.5%. The fact is that the total number of teachers at primary level has fallen over the last ten years, while enrolments have grown by about 37%. As a result, the average PTR has increased from 26:1 to 36:1 (Lewin, 2002). This means that teacher supply has not kept pace with increasing school enrolments over the years.

At the SSS level national PTRs decreased from the 1987/88 ratio of about 29.2 to about 17.0 (see appendix 3). PTRs for Northern, Upper East and Upper West Regions are well above the national average. The Brong-Ahafo Region had the lowest SSS PTR (12.81) as at 1996/97.

4.2 Future Demand for Teachers[8]

Gross enrolment rates across the primary cycle averaged about 73% in 1998, having fallen from nearly 80% in the early 1990s. At JSS level gross enrolment rates were stable through the 1990s at around 58%. Over the period from 1988 to 1998 the school age population of 6-14 year olds grew by nearly 4% per annum (MOE 1999). The increasing growth rate in the basic schools is causing a high demand for teachers. At the same time HIV/AIDS studies suggest that teachers particularly in rural deprived are the most vulnerable to the disease due to mobility factors (see chapter 5).

Teacher attrition rates are difficult to estimate. From their analysis, however, Akyeampong et al., (2000) estimates the attrition rate of trained teachers to be approximately 5%. Studies in Ghana also suggest that teachers remain in the profession for a period of 4-5 year after training college (Ghana Muster Study, 2002).

Projections show that:

- If the PTRs and GER remain constant annual demand for new teachers will rise from 5,700 to 9,100 at primary and 3,400 to 5,400 at JSS----making a total demand for between 9,100 to 11,300 teacher over the period from 1998 to 2010.

- If all untrained teachers currently in the system were to be trained over the next five-year period then demand for training would significantly increase. At current rates of untrained teachers this would mean an increase of about 2,500 at primary level and 1,000 at JSS[9] requiring training each year. This would remove the current backlog but not include new teachers coming into the system.

- Total annual demand for new primary and JSS teachers rises from about 12,600 a year at the beginning of the projection period to 15,500 in 2005 (the last year of training the untrained teacher), and to 14,500 by 2010 (after all untrained teachers have been trained). This can be compared to the current total output of about 6000 per year from the 38 training colleges (Akyeampong, Furlong & Lewin, 2000).

The demand for training is substantially above current capacity and that the demand for new teachers and training to reduce the backlog of untrained teachers requires more than double current output from the Teacher Training Colleges (TTCs).

To achieve the objectives of FCUBE the effort required is described as follows: "If a conservative target is chosen (i.e. the achievement of GER 100% by 2010 for primary and JSS, representing the condition where there

[8] Source: Akyeampong, Furlong & Lewin, (2000)
[9] This would also temporarily increase the demand for new teachers assuming that replacement cover was organised for those in training.

are enough school places for all children of school age) additional teachers are needed over and above these estimates which assume that GERs remain constant. The total additional number needed rises from about 24,000 to 39,000 at primary, and from 28,000 to 44,000 at JSS over the period from 1998 to 2010. *Translated into annual additional demand, something* ***like 7000*** *more new teachers would be needed each year to achieve GER 100% at primary and JSS, over and above those needed to maintain current GERs.* This implies a total annual demand **of 22,000 to 29,000** depending on the attrition rate chosen. Once GER 100% is achieved demand would fall back to replacement levels of about half these amounts." (Akyeampong, Furlong & Lewin 2000, p. 23).

The high attrition rates within the teaching profession can be traced to the low status of the teacher and the orientation, motive and ambition of those entering the training colleges. Recent studies from UCEW suggest that the vast majority of those entering the teaching profession were unable to gain entrance into University and therefore use teaching as a stepping-stone to obtaining a degree. A large majority of teachers taking special needs education were found to exit the profession shortly after completion of their degree programmes.

4.3 Increasing Capacity to Train Teachers

Teacher training colleges do not have capacity to double or triple enrolments if they are provided with the financial resources to expand enrolment. Increasing access to pre-service teacher training colleges by increasing intake of students whilst continuing to encourage the recruitment of untrained teachers to be trained on the job may be considered (Akyeampong, 2002). Study leave policy would require drastic review to cope with the problem.

The study leave system is fraught with inefficiencies that have direct consequences for teacher supply. The Ghana MUSTER studies clearly indicated that study leave with pay constituted an attractive policy for certificate 'A' teachers to move up the teaching ladder e.g. secondary level or exit teaching altogether. Also, the policy served as a major incentive for many who would otherwise not consider teaching but encouraged the phenomenon of teaching as a 'stepping stone' to other careers outside teaching or to further education. The evidence from MUSTER suggests that study leave is considered more a *personal* incentive than a *professional* one.

From 1997/98 to 2001/02, a total of 30,253 personnel of the GES have enjoyed the study leave facility. But unfortunately, study leave creates huge vacancies in the teaching profession. Table 21 reveals that from 1999 – 2001 only about 30% of those who completed their further training through the study leave with pay system could be posted back into schools.

Table 21: Relationship between Personnel Granted Study Leave and Those Completing Courses in the Same Year

Year	No. of Personnel Granted Study Leave	No. of Personnel who Completed and Posted	Vacancy Created
1999/2000	6343	1642	4701
2000/2001	10103	3272	6831
Total	16446	4914	11532

Source: HRMD/GES, 2002

The estimated cost involved in granting study leave shows it amounts to a huge component of the education budget. Over a five-year period (1997/98-2001/2002) the estimated cost is a staggering Three Hundred and Six Billion Cedis (¢306 billion) (HRMD/GES Statistical Digest, 2002). This is excessive, especially where the majority of teachers who enjoy this facility are not posted back into teaching or are unable to find teaching positions in the subjects they specialised in.

GES statistical data suggest that the granting of study leave leads to an excess of teachers in some subjects which schools are unable to absorb. Better mapping of system requirements to granting of study leave is needed to enhance its efficiency and effectiveness. Savings made on improved mapping strategies for study leave could be used to improve the quality of educational inputs e.g. the supply of school textbooks. Limiting the numbers of teachers on study leave in any one year is also critically required. Another approach is to use study leave as a performance incentive for those who are demonstrating dedication and interest in the profession particularly those serving in the rural deprived areas.

The emerging evidence from recent studies on teacher supply and demand strongly suggest that Ghana must, as a matter of priority, promote and pursue distance learning modes of training for teachers to maximize benefits in training investments.

The system of teacher posting also requires improvements that link supply to demand especially in the most deprived areas. A study by Casely-Hayford (2001) suggest that the teacher allocation formula favours some regions "which are not the most needy areas for teachers to serve" (p. 32). Furthermore, Casely-Hayford concludes: "the analysis of teacher participation across the country reveals that there are significant differences between the levels of deprivation between regions, districts and within districts therefore posting and deployment procedures will have to take into account the levels of deprivation in order to provide extra incentives for those in the 'more deprived districts' (p. 33).

In view of the evidence about postings, particularly at the basic education level, the current policy on district sponsorship of teacher trainees needs to be seriously pursued. District sponsorship must be based on demand and organised in such a way to promote intrinsic motivation for those sponsored to return to their sponsoring districts. There is evidence that District Directors of Education are not serious about identifying persons who have links with the

district, nor are they guided by any projections as to immediate and short-term teachers requirements.

Distance Education as a Strategy for Training Teachers

Distance Education is a viable alternative mode of training teachers that has been used effectively in countries such as Nigeria and Kenya. Training teachers at a distance has many advantages. It is less expensive and it does not disrupt the teacher supply situation in schools. It also has many challenges, which must be addressed. These include supervision of several hundreds or thousands of teachers scattered in various geographical locations of the country; and the design of well packaged support-service for distance learners.

Otherwise with appropriate technology such as linking the 38 training colleges by satellite to University College of Education, Winneba and the University of Cape Coast would be an effective means of training the additional teachers required. As a matter of urgency the Ministry of Education should look into how such a scheme could be set up and conduct studies to determine the needs of potential clients. Distance education for training teachers should also target 'untrained' teachers in the system, particularly graduates of SSS who may be given teaching appointments and enrolled on distance programmes. If made attractive it is possible that many may choose this route to becoming a teacher. For example, the SSS graduate could spend one year "OUT" on distance and one term "IN" the training college before graduating as a diploma teacher.

One further advantage of distance teacher training within the Ghanaian context is the increased utilisation of training college facilities e.g. classrooms, resource centres which are currently under-utilised. Planning distance education for teachers so that it synchronises with the regular residential system is one way of using facilities more efficiently.

In addition to training teachers by distance, we need as Akyeampong (2002) has suggested "to explore *shorter pre-service training, longer classroom practice,* and *continuous in-service training* … this may require that we explore the possibility of re-introducing a modular teacher training … this may be the best way of meeting the demand for teachers especially in rural areas" (p. 100).

4.4 Teacher Motivation and Incentives

Job satisfaction in the teaching profession, as in similar professions, is critical to teacher performance and its impact on student learning and achievement. The drive to improve educational quality will not make the expected impact if the welfare and professional motivation of teachers is not adequately addressed. Teacher motivation and the incentives available to them indirectly impact the teacher supply and demand equation.

A recent study on teacher motivation in Ghana conducted by GES/UNICEF (1995) points to myriad of factors teachers consider important in motivating them in their job (GES/DAE/UNICEF, 1995).

The main motivational factors were:

- Better salary and allowances
- More teaching and learning materials
- Regular upgrading of knowledge.

The least were:

- Merit Awards
- Posting to places of choice and
- Lower class sizes

Apart from the obvious but important call by teachers for better salary and allowances, the remaining factors mostly point to the need for a *better teaching environment*. Improving the professional environment of teachers i.e. ensuring that teachers have access to teaching and learning materials, ensuring that students have the relevant textbooks, and ensuring that teachers have regular in-service training is among the most valued motivational factors for teachers in Ghana.

The image and status of teaching is another important area needing some policy intervention. An important factor defining the teachers' image in society are the conditions under which teaching and learning take place. Poor teaching and learning environments communicates to both teachers and communities that teaching is not a valued profession. Several studies have documented schools, especially in rural areas, where there is lack of furniture – sometimes teachers have no desks, and very acute supply of essential books and pupil materials (Fobih et al., 1999; Casely-Hayford, 2001; Hedges, 2002). Improving the professional image of teachers would mean improving the inputs to their professional practice. Thus, Government efforts at improving educational inputs e.g. provision of adequate materials, infrastructure and training, would serve to enhance teachers' professional image in society.

The socio-economic condition of teachers' especially female teachers in rural Ghana is particularly poor and requires specific policies that can rapidly improve conditions. Special incentives for female serving in rural deprived areas are needed due to the risk involved when females take up these posts (lack of health facilities, potential separation from their children/families due to lack of educational facilities). Female teachers must also be trained to work in rural deprived area particularly young girls who have just completed training college.

Fortunately, models of effective intervention strategies that have motivated teachers towards more effective professional practice exist. Examples are the QUIPS project and Whole School Development (WSD). Such projects appear to have been effective for the following reasons:

- They have sought to improve the professional environment of teachers,
- Provided demand driven in-service training
- Provided teaching and learning materials and equipped teachers to use and produce more of such instructional materials
- Provided micro-grants (QUIPS project to schools that have had very positive effects on teacher morale and at improving the quality of teaching and learning. These grants were used for the purchase of school furniture, textbooks, exercise books and sports equipment).
- The QUIPS project, especially, emphasised life long learning and continued professional development which contributed to a continued level of commitment to work and professional growth

Some of these successful intervention strategies should be mainstreamed into the professional service of teachers to increase motivation and improve the image of the profession.

Evidence from WSD research suggest that in the absence of rewards and incentives teachers are often reluctant to go the extra mile to implement innovations many of which come with work overload (Sayed, Akyeampong & Ampiah 2000). But teachers often see incentives, particularly monetary incentives, as recognition of their effort in implementing new educational practices. This means that no matter how small the monetary incentive it sends a positive signal to teachers of their professional worth in educational change.

State of the Teaching Process

The quality of teaching is an indication of the quality of educational delivery. Several studies conducted in the last ten years suggest that given the necessary supportive structures e.g. school INSET, regular supervision classroom practices of teachers can be significantly improved.

Evidence from several studies (e.g. MUSTER studies, Evaluation of Primary School Development Project by Fobih and colleagues) clearly indicates that primary level teaching is in need of **critical support** to improve quality. Many teachers see primary level teaching as having a lower status image than teaching at the secondary school level (Akyeampong 2002). Since primary school teaching builds the foundation for all formal education, it requires investments and policies that will make it attractive and fulfilling.

Fobih, Koomson and Akyeampong (1999) conducted an extensive evaluation of primary school teaching practices in Ghana covering 24 communities drawn from five districts in five regions. The following are some of their findings pertaining to teacher attendance, instructional time, instructional quality, supervision and infrastructure.

Teacher Attendance and instructional time

- Teacher absenteeism remains a problem at the primary school level.

- Less contact with pupils . The average teachers teach less than 50% of the subjects specified on the time-table daily. Schools that had benefited from 'school improvement fund' (SIF) utilized a higher amount of instructional time than other types of schools

Instructional Quality and supervision

- Teachers set very low number of exercises in Mathematics and English. SIF schools had a relatively higher number of exercises than schools that had not enjoyed the SIF package.

- Internal supervision of teachers' work in the school by the head teachers was weak. The same could be said of external supervision provided by circuit supervisions.

Infrastructure

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- A study by Fobih suggested that the teaching process could be greatly improved if incentive packages target both the teacher and the school. Schools that had enjoyed SIF incentive package demonstrated improved instructional quality and pupil achievement.

But, the overarching message from intervention projects such as QUIPS is that Ghanaian teachers have tremendous potential for improvement provided attention is given to models of school improvement strategies that place the teacher and community members in greater co-operation towards school improvement. If this is done, teacher professionalism improves. The QUIPS project clearly demonstrates the importance of strengthening relationships between teacher, student and communities.

The recent education initiative – Whole School Development (WSD) also shows that teachers' classroom practices can be significantly improved through *effective school management, appropriate and adequate resourcing of schools and capacity building at the school level.* Following the WSD approach, QUIPS established 330 model schools where a positive and effective learning environment involving community support was created. The message from this is that the quality of teaching and learning in schools cannot be isolated from important contingencies that impact on student learning. What this means is that effective teachers and teaching do not occur in an infrastructure and professional vacuum. Clearly, one of the important commitments GES can make towards improving teacher professionalism in Ghana is the commitment towards improving the tools teachers need in performing their job, and investing in plans that bring schools and communities into closer partnership to improve schools.

Improving Teachers' Classroom Work

In the QUIPS mid-term assessment teachers were asked to indicate what would improve their classroom practices. The critical areas they mentioned included the following:

Lesson note preparation – The use of textbooks, teacher's handbooks and syllabi enhanced the quality of lesson notes preparation. Teachers noted that these tools helped them to connect new knowledge to pupils' prior knowledge, design the methods for instruction, prepare the materials to be used and make a plan for assessment of learning. The QUIPS researchers concluded that "improved skills in lesson note preparation appear to be a major factor in the improved quality of teaching and learning at QUIPS supported schools" (p. 26).

Teaching and Learning Materials – Teachers saw the use of teaching and learning materials as critical to improving student learning. Thus, the production and provision of essential instructional support materials was perceived as basic for quality classroom work. Teachers however, complain that the production of instructional materials can be an additional professional burden if resources are not available to produce low cost and locally available teaching and learning materials. QUIPS have suggested the setting up of resource labs that would be located in TTCs and accessible to schoolteachers for the development of instructional materials.

School-based and district level Inset- Teachers saw this as providing the opportunity to share best practices and exchange ideas about teaching. Institutionalising INSET must therefore be of paramount strategic policy concern. If teachers will be effective in their practice INSET must not be the privilege of a few, but rather must become an integral part of teacher development, certification and promotion.

Improving the recruitment of teacher trainees

One of the biggest challenges threatening the supply of teachers is the recruitment of students into teacher training. Teacher training clearly is unable to attract better academically qualified candidates. The MUSTER studies revealed that the majority of entrants barely meet the qualifying grades in English and mathematics and that the standards are falling. Less than 30% who pass to enter teacher training colleges possess grades in the top pass category of A, B or C in English. Raising the academic entry qualification might seem like the appropriate action to take to improve quality of student teachers. However, this could threaten supply.

A campaign should be launched aimed at attracting better qualified candidates for teacher training and also providing an access course for students, especially female candidates, whose grades may not qualify them to train as teachers. This will be a very challenging task for the Ghana

Education Service. But with careful planning, attractive incentives and supportive structures should see some of the best SSS graduates opting for teacher training. Such an aggressive recruitment drive has been adopted by the UK, which has especially targeted students for science and maths teaching.

Improving the scope and level of recruitment of students as pupil teachers will also be necessary to meet the demand particularly in rural deprived areas. With simple training, NGO's are demonstrating that dedication and interest in teaching are prime requisites for improved quality. The MOE should put more emphasis on interviewing new teachers who are recruited into the training college and at the district levels (as pupil teachers to ensure that their orientation to serving as teachers is right. Without the proper motivation and interest in the teaching profession children will continue to be deprived of their most basic rights in the school--- the knowledge to read.

Conclusion

The issue of teacher demand, supply and retention is inextricably linked to the quality of inputs to teaching that make the profession a fulfilling one. If teachers, as they begin their professional career lack the relevant professional resources to carry out their work, have little opportunity for professional development, are not provided with the necessary incentives to encourage them but are expected to improve educational quality, then they are likely to feel teaching is a difficult job and seek to leave the profession. Indeed, MUSTER qualitative evidence regarding early teaching experiences of beginning teachers suggest that problems with unsuitable accommodation, challenges of working in deprived communities, conflicts that often occur with community members over poor pupil performance are ingredients that undermine motivation and commitment to teaching (Akyeampong & Lewin, 2002).

Given the current situation in Ghana, a new breed of Ghanaian teachers is needed—those who may not have all the qualifications but are interested and committed to teaching profession particularly in rural deprived areas. More emphasis by MOE and teacher education division should be given to recruiting the "right type of teacher" as opposed to the most qualified. In order to transform the community we need a high level of dedication and youth that see themselves as being key to ensuring that the next generation in Ghana is a productive and effective one. In the early days of Nkrumah's government the teacher was made to feel that they were the key pins to national development, the new government should place the teacher (whether "trained or untrained") in a new light and provide new channels for our vibrant youth to serve the country in this most important capacity.

There is an urgent need for fresh policies that place the teacher at the centre of educational reform and economic development initiatives. All educational inputs must serve to make teaching professionally fulfilling and rewarding.

Chapter 5: The Disadvantaged, Special Needs and Cross Cutting Issues

5.1 Gender Equity Issues and Girls' Education

The following section presents the main challenges towards achieving gender equity within the sector, the key priorities and the tested strategies identified for achieving higher levels of gender equity within the education system.

Despite the global empirical evidence suggesting that women's education is crucial in order to ensure that a country's development aspirations are achieved, the goals of gender equity are often not achieved and sustained across the education system (UNESCO, 2002). Gender equity remains an add on or at best is "mainstreamed" as opposed to being key policy thrust within poverty reduction programming, and educational policy formulation[10].

Ghana is among the 88 countries, which will have difficulty achieving the EFA equity goals by 2005 (World Bank, 2002). The educational statistics demonstrate the difficulty in achieving gender equity across the system --- ensuring literate girls become educated women. Today:

- 75% of girls access the formal Primary education system --- less than 50% in several districts in the Northern Regions and deprived rural areas of the country (GSS, 2000)
- Less than 60% of girls complete Primary school level with far fewer in the Northern and upper regions of the country
- Only 30% of these girls complete JSS
- Only 20% of these girls at JSS complete SSS and far less access the university system (18% average over the last 10 years).
- One out of every eight women has completed 6 years of Primary schooling according to the Core Welfare Indicator Study (GSS, 1998)
- Over 50% of the Ghanaian adult population are illiterate and 75% of these are women (NFED, 1996)

Studies by Quaisie (1997) reveal that poverty contributes to the low educational attainment of females. Most often parents from low socio-economic groups prefer to send their boys to school instead of their girls. Several research reports also point to the lack of parental care as one of the key reasons why girls are unable to access, stay and achieve at basic and secondary levels of education (Casely-Hayford with Wilson, 2001). Poverty and lack of parental care often lead to early pregnancy, inability of girls to purchase basic needs (i.e. food, sanitary napkins, panties) -- forcing them to engage in "transactional sex". This is a dangerous social phenomenon in any society attempting to control HIV/AIDS.

Prah (2002) argues that there are serious gender inequalities in Ghanaian education "the nature of women's education, often is more oriented towards

[10] See GPRS (2002) very little mention is made of girls' education or women's literacy in the Ghana Poverty Reduction Strategy.

teaching women to be better housewives and mothers than equipping them with the skills and training they need to enable them to hold their own beside men in a rapidly changing world". Making classrooms more child-friendly particularly for girls requires more female role models. Increasing the number of female teachers can have a positive impact on girls' ability to aspire to higher levels of education (Rugh, 2000).

Prah provides evidence at tertiary level, which suggests that education institutions have "cultures" which foster gender inequalities such as the attitudes of teachers, the school curriculum, textbooks used and educational policies which are mainly modelled on male perspectives and values (Prah 2002). Research by Sutherland-Addy (1995) and Adomako (1993) in Ghanaian classrooms identified ways teachers adversely influence the performance of girls. They argue that girls are often:

- Discouraged and intimidated by teachers due to their failure to cultivate a sense of independence and trust in their abilities
- Sexual harassment
- Abuse and exploitation at school level (i.e. sending them on errands during school hours)

Recommendations

The GES must consider its role as a facilitator of policy and programmes and leave implementation to the district and regional levels by empowering them through decentralisation. The ESR team suggests the following:

- The Girls' Education Unit should be expanded and resourced to ensure that issues of child rights and protection are properly addressed (i.e. District girls' officers should be responsible for reporting cases of abuse to DEOC's and other sub committees).

- Gender officers / task teams should be appointed by all Secondary and Tertiary level institutions to monitor gender objectives and policies. These officers can also listen to and direct complaints of sexual abuse and discrimination--- taking appropriate action when necessary.

A set of equity targets should be set and a comprehensive approach to programming, which pays particular attention to female education, should be developed. The targets should:

- Place the Northern sector, Western and Central Regions as a high priority in view of the significant problems of gender inequity in the education sector that exist there.
- Focus programming on girls between the ages of 6-12 (P1 to JSS3) since they are highly vulnerable due to early marriage, teenage pregnancy and HIV/AIDS.

The Non-formal Education Division within the Ministry of Education has set the most progressive and comprehensive gender targets. The gender policy

document is an excellent blueprint for other sub-sectors to emulate. Alongside this policy, the Girls' Education Unit "National Vision for Girls Education" provides the framework for channelling donor assistance and promoting gender equity at the basic level. A broader MOE gender strategy and action plan should be developed which covers gender concerns at the secondary, tertiary and management levels[11].

The main focus of the MOE's gender policy should be to ensure that girls and women reach higher levels within the education system. More work within the MOE is needed to move the gender equity debate from access and participation, to ensure quality, retention and opportunity for all is achieved.[12]

5.2 Special Needs Education

The following section examines the effectiveness of Special Needs Education and presents the main challenges, the key priority areas and the strategies for improving the coverage and integration of children with special needs into the mainstream[13]. According to Disability Studies conducted by the Ministry of Manpower Development and Employment (MMDE) approximately 6% of the Ghanaian population has some type of mild to severe disability. The UN suggests that between 10-12 % of populations within the developing world have some type of disability.

According to the latest MOE data only 3,362 children are provided with special needs services representing less than 2% of the population (see table 23 below). Studies suggest that approximately 10% of visually impaired children are being serviced through special needs institutions. Females were under represented in most of the special needs schools (30% on intake).

Table 22: Number of Children in Special Needs Schools

Type of institution	Male	Female	Total number of students
Schools for the Deaf	1348	839	2187
Schools for the Blind	332	152	484
Mentally Handicapped	432	237	669
Deaf /Blind	22	--	22
Total	2134	1228	3362

(Special Needs Division, 2001)

Some of the access and participation challenges within the sub sector are as follows:

[11] The recommendations in the Gender Situational Analysis produced, as part of the ESR should provide a research base for this strategy.

[12] Massiah presents a model of gender relations, which moves gender issues from level 1 "conceptual or subjective visibility, to level 2--theoretical and statistical visibility (where the issues become information data) to level 3 where gender issues finally become socio-economically and politically. Visible as well as domestically visible. Gender issues in education in Ghana are somewhere between level 1 and level 2 in visibility.

[13] The section is a synthesis based on the situational analysis and workshop report on Special Needs Education carried out as part of the ESR exercise.

- Services are unevenly distributed across the country and located mainly in urban centres.
- There is a problem in ensuring only severely handicapped children gain access to special needs schools and others are integrated into the mainstream.

There are also several key challenges related to quality facing the special needs sub-sector including the:

- High attrition rate of teacher's completing UCEW Special Needs training.
- High proportion of teachers not interested in Special Needs children
- Disagreement within the sub-sector concerning the type of sign language (I.e. exact English vs. Ghanaian Sign")
- Lack of books for the blind and basic special equipment for the Deaf
- Lack of financing to the sector (less than 4 % of the MOE budget goes to special needs children).
- Lack of repair and maintenance of existing buildings
- The high degree of stigma attached to people with special needs
- Lack of books and curriculum materials for children with special needs

There is a serious problem of teacher attrition within the special needs education sub sector. In 2000/2001 ---there were 216 graduates from the diploma programme and 111 from the four-year Bachelor of Education programme at University College of Education at Winneba (UCEW). An informal investigation carried out by UCEW in 2002 indicated that 90% of the second year students in special needs education (241 in total) admitted that they had joined UCEW only for the degree and were not interested in teaching in the special education field (Gadagbui, 2002).

The institutions and schools catering to the mentally handicapped have had to develop their own curriculum. The Special needs public schools, with the assistance of GTZ, a team of experts are in the process of developing curriculum for mentally handicapped institutions. The assistive equipment is often provided through support by NGO's is not regular.

The main concern for SED and the Heads of Special Schools is the need to complete existing buildings, upgrade and maintain the existing Special Schools. An in-depth analysis of the infrastructure needs of special schools is contained in the situational analysis on special needs education (Casely-Hayford, 2002). Three more schools for the Blind are needed at the basic level and one more school for the deaf at the SSS level. There is an urgent need for more assessment centres particularly in the regions outside of Accra and Ashanti.

The major challenge facing the special needs education programming in Ghana are the lack of resources. According to the latest MTEF budget estimates for MOE, the special needs sector receives less than 0.4% to run its entire programme. The majority of this funding is supporting institutional care in the form of food for children in the special schools. There has been very

little funding allocated to the main MOE policy thrust of creating inclusive education programmes for special needs children.

Inclusive education programming

Despite the MOE policy for inclusive education there are very few children involved in the programme to date. Approximately 87 Children have been successfully integrated through the Sight Saver/MOE programme. There are only three districts throughout the country, which have inclusive education programmes for low vision children and these are supported mainly through the NGO sector (i.e. Sight Savers International).

Districts, which have successfully integrated special needs children with low to moderate disabilities, have the support of at least two itinerant teachers and one peripatetic officer per district. Most of these officers do not have adequate transport and are unable to supervise the schools on a regular basis. The ESR team found that there is limited access for special needs children through the special schools since they are often urban based.

Community Based Rehabilitation programmes (CBR) are running in collaboration with the MMDE and help to assist parents and adults raise awareness and mobilise resources to support special needs children at village level. Thirty-six districts in the country are involved in the programme.

One cost effective approach in reaching larger numbers of children with special needs will be the implementation of a systematic programme for inclusive education preparing all its teacher trainees in simple approaches to identify, support and assist children with special needs in the mainstream schools. The Salamanca declaration signed by Ghana in 1994 states "the practice of mainstreaming children with disabilities should be an integral part *of all national plans for achieving Education for All (EFA).* This statement should be the basis of all policies and mechanisms put in place to address the issue of special needs education.

Key recommendations

The Special Needs Division should be provided with adequate financial support to ensure inclusive education programming are scaled up and implemented. At least 2-3% of the MOE budget should be allocated to special needs children. One region of the country each year should be identified to implement an intensive programme for inclusive education over the next 10 years (Select 5-10 schools per district for inclusive education using itinerant teachers based at these schools.)

Therefore in order to put into place definitive changes in the area of special needs education the following areas need to be given serious consideration:

- Priority must be given to the establishment of at least 4 fully equipped and staffed assessment centres outside of Accra, and Kumasi.

- A national statement and policy directive should be issued directing all institutions and programmes to begin using "Ghanaian Sign language" as the medium of instruction for severely impaired deaf children.
- The CRDD should explore ways of incorporating issues of special needs into the mainstream curriculum so that all children in the country will come to appreciate the special value of children with disability.
- Financial input should be allocated to NGO's and media practitioners to develop programming on radio and television, which promotes positive attitudes towards children and adults with disabilities.
- A review of the special education programme at the UCEW to ensure that the teaching of Sign Language and interpreting has a larger part in the curriculum.
- Special needs education supplements at all training colleges should include more in-depth knowledge of special needs children particularly in light of the policy on inclusive education. All teachers in the country should be trained in the UNESCO pack, which provides basic approaches to helping children with special needs.

5.3 HIV/AIDS and Education

This section examines the situation of HIV/AIDS within the Education Sector by providing an examination of the policy, strategy and implementation of programmes to combat HIV/AIDS[14]. The situation of HIV/AIDS within the education sector is becoming a critical area for the Ministry of Education to focus on. The formal education sector is catering to the "largest percentage of the population"-- covering over 37.6% of the entire national population (HIV/AIDS Workplan, 2002).

The MOE strategy for HIV/AIDS involves reaching out to a workforce of over 180,000 when one includes all MOE agencies and over 7,000,000 learners involved in formal and non-formal educational programmes (HIV/AIDS Secretariat, 2002) inclusive of TTC's and Technical vocational institutes, SSS, JSS, and Primary. While education can be an important vehicle for assisting in the prevention of HIV/AIDS, the disease can also do the most harm in the sector by preventing the delivery of quality education.

UNAIDS (2001) suggests that the education system will be affected in two main ways:

- Reduction in school enrolment due to child death, decreased fertility (demand) and higher demand on child labour.
- Reduction in educational quality due to numbers of teachers absent and death due to AIDS (number of primary school pupils who have lost teacher to AIDS in 1999) (supply)

[14] The section is based on the "Situational Analysis on HIV/AIDS and School Health" produced as part of the ESR exercise (Casely-Hayford, 2002). It also relies heavily on two studies conducted for DANIDA and UNAIDS, 2002[14].

Adult HIV prevalence according to the Ghana AIDS Commission (GAC) and the Ghana National AIDS Control Programme is 3%. The number of reported AIDS cases for females in the 15 to 24 age group is much higher than for males in the same group due to the early sexual activity of young girls and the fact that many girls have older male partners (NACP, 2001a). Children between the ages of 5 to 14 are considered by Government as the **"window of hope"** since this age group can be taught to protect themselves before they become sexually active.

The percentage of HIV infected children range between **4 to 6%** of the total HIV/AIDS population in West African Countries. Mother to child transmission remains high in these countries ranging from 25 to 45% in Africa (UNAIDS, 2000d).

The Ghana National AIDS Control programme estimates that the number of AIDS orphans will increase to 400,000 by 2010. Enrolment rates in schools are lower for orphans further impacting on the economy in the long run. Growing numbers of HIV/AIDS cases within Ghana will affect the entire education system from a management and outcome perspective.

Deaths among teachers in Ghana are on the increase (MOE, 2002). Deaths of teachers in service at the pre-tertiary level revealed a rise in the period of 1995 to 1998 particularly in the Eastern, Western, Central and Volta regions of the country. These are the same regions with the highest rates of HIV infection. The lack of data makes it extremely difficult to estimate or project the impact the epidemic will have on the demand, supply and delivery of educational services in Ghana.

Unfortunately, monitoring and data information on HIV/AIDS impact within the education sector in Ghana is still not available through EMIS or other data systems[15]. There are no statistics specifically documenting the prevalence, epidemiology or determinants of the disease among teachers, students or education workers (MOE Workplan, 2002) More work is needed to ensure that MOE data monitoring systems include HIV/AIDS as a major data need.

The main emphasis of the MOE's HIV/AIDS work plan is the focus on awareness creation activities with less emphasis on institutionalising behavioural change processes (i.e. curriculum, guidance and counselling services). One of the key strategies is to implement training and educational programmes for behaviour change among school pupils and students. The education sector is planning to develop a 20-hour fast track HIV/AIDs Programme for implementation in the schools.

The low projection scenario estimates that HIV prevalence among adults will rise to 3.3% in 2004 and 3.6% in 2009 and 4.0% by 2014. The high prevalence scenario estimates that HIV/AIDS prevalence rates will rise to 4.7% in 2004, **6.9%** in 2009 and **9%** by 2014 (NACP, 2001a). The HIV

[15] MOE should begin tracking the rate of teacher death through identification of the reasons for deaths in the system.

prevalence varies across the regions since there are several levels of infection in different parts of the country. According to NACP, Eastern region has consistently reported the highest levels of HIV infection followed by the Volta region, Greater Accra, Western, Ashanti and Central regions. The gap is narrowing between the regions as the epidemic progresses (NACP, 2001a).

Some identifiable groups within the education sector, who are particularly vulnerable to the disease, include learners (particularly the girl child), teachers (particularly those on transfer or first posting), National Service Personnel, educational directors, non-teaching staff and other educational personnel who are highly mobile. Mobility is one of the key factors in vulnerability since people are away from their regular partners and susceptible to extra marital relationships.

Studies in Africa reveal that girls aged between 15 to 19 years are five to six times more likely to contract HIV than boys the same age. UNAIDS has found that the infection rate in men eventually catches up but not until after they have reached their late 20's or early 30's (UNAIDS, 2000d).

MOE Strategies in place for HIV/AIDS programming

The Ministry of Education has been a leader within Ghana's HIV/AIDS sector in responding to the comprehensive HIV/AIDS planning initiatives carried out by the GOG and UNAIDS.[16] These policy processes have involved an extensive multi-sectoral approach to planning involving all ministries within Government. The MOE has developed several strategic documents to guide the financing and implementation of a unified response within the sector.

The HIV/AIDS Secretariat has used the strategic framework and work-plan to develop a one-year work plan. The Ghana Aids Fund (GARF) has agreed to finance the one year costed plan for the MOE and GES at 100,000 US$ per programme. The Secretariat is assisting other subvented agencies draw up plans for training staff and developing a workplace HIV/AIDS programme.

Apart from the two major implementation strategies[17]-- for securing funding and creating awareness within the highest levels of Government, the HIV/AIDS secretariat has developed a comprehensive approach to implementation which involves regional, and district institutional mechanisms. The institutional arrangements will include 10 regional focal people, 110 district focal people, circuit focal people and schools. The National HIV/AIDS Secretariat is staffed by one co-ordinator and two officers, which relate to the relevant agencies, sectoral ministries and development partners.

The focus of the MOE's programming is on the "Window of Hope"--- **youth between the ages of 0-15 years of age.** These are the ages where children are still impressionable. One of the key strategies is to implement training and educational programmes for behaviour change among school pupils and

[16] These include the Sectoral Plans and Strategic Frameworks.
[17] Outlined in a Situational analysis of HIV/AIDS in Education (Casely-Hayford, 2002)

students. The education sector is planning to develop a 20-hour fast track HIV/AIDs programme for implementation in the schools. The main emphasis of the MOE's HIV/AIDS work plan is the focus on awareness creation activities with less emphasis on institutionalising behavioural change processes (i.e. curriculum and guidance and counselling services). The main strategic interventions involve the following:

- Prevention of new infections
- Care and Support
- Creating an Enabling Environment
- Decentralised Implementation and Institutional Arrangements
- Research, Monitoring and Evaluation

School based activities:

There are several activities, which have taken off within the Ministry; these are mainly concerned with awareness creation programmes for staff at the national head quarters and teachers at the district and regional levels. Funds were released through the Whole School Development (WSD) programme to undertake HIV/AIDS awareness programmes at the District level throughout the country. The SHEP unit has been instrumental in conducting these awareness creation activities with staff and implementing programmes at the district level.

There are three main interventions on going within the education sector to prevent the spread of HIV/AIDS. These include:

- School Health Education programme activities
- The Population and Family Life Education (POPFLE) of CRD
- The distribution of condoms to students at the Tertiary Level Institutions particularly the Universities

Curriculum: HIV/AIDS issues are integrated in some subjects such as Primary Six "Healthy Living", Life skills syllabus and even the science syllabus at JSS and SSS levels. The non-formal education division has also infused HIV/AIDS topics within literacy classes in all the 15 language groups. Reports from experts indicate that the curriculum is mainly informational and not aimed at behaviour change. More emphasis should be placed on moral education through out the curriculum particularly at the lower primary level.

Teacher Education: The MOE is planning an integrated training programme for 3 days in every teacher training college, which will include both a moral and ethical component to HIV/AIDS awareness training.

There have been several information campaigns over the last two years using radio and television to create awareness of the risk of HIV/AIDS. The most popular has been the "Stop AIDS Love Life Campaign" by John Hopkins University (JHU), which has focussed on youth (15-24) and adults. More recently JHU have launched another campaign called the "Journey of Hope"

which is a multi-media kit containing games which help people especially youth make choices and think about their future and the risks of HIV/AIDS.

Peer-to-Peer education is proving to be one of the most effective approaches used by NGOs and other agencies in HIV/AIDS prevention. Interviews with FHI revealed that face-to-face peer education is the most effective communication strategy for behavioural change especially among youth. UNICEF has recently initiated a programme called the SARA, which is primarily focussed on girls between the ages of 10-15 years of age as it is recognised that they will have a better chance of remaining free from the disease if they make significant strides in adopting safe behaviour and practising abstinence before marriage. The SARA uses an edu-entertainment approach (i.e. magazines, videos and posters) to convey stories about young girls and reproductive health themes**.**

Key recommendations

There is an urgent need to conduct more research to assess the current levels of HIV/AIDS within the Tertiary, Secondary and Basic Levels of education (teachers and pupils). According to experts in the field, research studies have not been conducted since they require the voluntary agreement of institutions and participants involved.

Ghana is still at an early stage of the pandemic and all efforts should be focused on prevention particularly within the early years through moral education, IEC campaigns and peer counselling among the youth. Children between the ages of 10-15 will have a better chance of remaining free from the disease if they make significant strides in adopting safe behaviour and practicing abstinence before marriage. Peer education will become one of the most effective approaches in order to break the promiscuous peer culture, which exists at the SSS and tertiary level institutions.

The entire process of creating awareness and changing behaviour within the MOE and its agencies should be considered carefully. The questions of the "awareness creation" and the emphasis on workshops and training should be reassessed to see if there are faster more effective approaches to reaching out to the large numbers of employees and students within the system on a regular and timely basis (i.e. radio, T.V. or even posters specifically targeting teachers, peer educators etc). More emphasis should be placed on assessing approaches, which encourage behaviour change and not only an exchange of information. Much more innovation is needed to ensure that regular channels of information and consultation can be developed possibly relying on health officers who run clinics for testing and counselling services on a yearly basis in each school and institution.

Different interventions should be designed for different levels within the system. (see Annex 16) For instance:

- Moral education particularly at the early childhood and basic level is essential

- Guidance and counselling services from JSS to Tertiary level
- Peer Education from JSS to Tertiary level
- Testing particularly at the University level
- Training and awareness creation through innovative and education specific IEC campaigns at all levels
- Workplace policy should be developed
- Code of Conduct for Schools should also be revisited

Curriculum Research and Development Division (CRDD) and POPFLE should reassess curriculum, along lines, which help children assess their own behaviour particularly at the younger age grouping where children are very impressionable. A value-based approach should be used particularly at the Basic and Early Childhood level.

- Moral and religious education at kindergarten, basic and secondary level should be intensified and made examinable at the basic education level.

- Improve and strengthen the level of **guidance and counselling** at all levels within the school system particularly at the JSS, secondary and tertiary levels. Counselling will be key to assisting youth reorient their behaviour particularly at the upper basic levels and SSS. Peer counselling should be introduced at all secondary and tertiary level institutions with the assistance of the NGO sector (i.e. World Education and West Africa AIDS Foundation, Planned Parenthood Association of Ghana).

- An independent committee set up in the Ministry of Education and Ministry of Communication should censor Media, educational materials and any HIV/AIDS public education programmes aimed at youth and children.

There is an urgent need to conduct more research to assess the current levels of HIV/AIDS within the Tertiary, Secondary and Basic Levels of education (teachers and pupils). According to experts in the field, research studies have not been conducted since they require the voluntary agreement of institutions and participants involved.

The MOE should carefully consider using existing materials, which have been tested, in other countries in the sub region in order to ensure efficacy in the "fast track approach". The Ministry should be careful not to try to "reinvent the wheel" and learn from other African countries, which are further along in programming for HIV/AIDS within the School System (UNESCO, 2002)[18]. The MOE's work plan should place more emphasis on guidance and

[18] UNESCO following the HIV/AIDS and Education Conference in Elmina in 2001 has developed a HIV/AIDS Strategic Resource Guide for African Countries. The Resource Book assists Ministries of Education learn about available curriculum and materials and methods around Africa and across the sub region. The resource book is available from the UNESCO office in Ghana.

counselling services and the provision of testing particularly at Second cycle and Tertiary institutions. Guidance counsellors should be trained to cope with issues concerning reproductive health.

5.4 School Health Programming (SHEP)

This section examines the School Health Programme within the Education Sector. The section provides an examination of the key issues confronting school health, the effectiveness of the programme and the recommendation to strengthen the SHEP programme.[19]

Status of health issues of children within the education sector

There are several pressing problems, which children in Ghana face and which SHEP appears to be best placed to address:

- Malnourishment among children is very high in Ghana
- Lack of nutritional supplements in some areas of the country (i.e. Vitamin A and Iodine deficiency particularly in the Northern region)
- Extremely poor hygienic conditions at most schools including lack of basic sanitation facilities and lack of potable water (GNCC, 2001;Ackom 2002)
- Early pregnancy and sexual activity among youth (MOH, 2000)
- Lack of parental care and high level of neglect

Many of these problems cannot be solved by the school alone and requires a high level of community school collaboration. The SHEP programme affords an opportunity for helping the school become a model of good health practice within the community. Programmes such as Child Scope and Child to Child are demonstrating the need for communities to become actively involved in school improvement. They also demonstrate that effective school health education can introduce more participatory approaches into the classroom and community setting.

The School Health Unit of the Ministry of Education is currently in the process of designing a policy and strategic plan for School Health programming in Ghana. The policy will focus mainly at the basic education level and involve several key agencies involved in SHEP programming including Development Partners and NGO's.

This strategic planning process places the SHEP Unit in a good position for sector wide support and resourcing. The Unit has had a long history of working with UNICEF and collaboration with other NGO's but has suffered from lack of internal financing to carry out its programmes at district level. The Ministry of Health and the Ministry of Education are given a mandate to collaborate on school health programmes. The programmes are more of a campaign approach and reach all levels of society. They also help with the screening of special needs children.

[19] The section is based on the "Situational Analysis on School Health" which serves as a background paper to the ESR (Casely-Hayford, 2002).

The SHEP programme tends to focus most of its activities at the basic education level. The Ministry of Education Policy and Programmes identifies the following goals and targets for SHEP programming: to promote good health and environmental sanitation in schools and communities in order to improve learning outcomes within the policy framework of MOE/GES;

SHEP activities include the following:

- Provision of water supply facilities in schools and colleges
- Establish linkages between good health and achievement levels
- Develop strategies to combat epidemics
- Develop an open approach to discussions on health and nutritional issues for children at all levels.
- Establish linkages between good health and environmentally friendly activities.

Reports from SHEP officers around the country reveal that many schools are involved in the formation of health clubs and committees, malaria prevention and control and STD/HIV advocacy, Immunisation and Vitamin A supplement and de-worming of children, screening, clean up campaigns and adolescent reproductive health education. An extensive evaluation needs to be carried out to determine the level of SHEP activity throughout the country.

The majority of SHEP activities at the school level forms part of the daily routine and does not require a great deal of extra effort on the part of SHEP officers. Ackom's (2002) assessment of school health activities in schools in the Accra and Central region reveals that teachers see School Health Activities as an added burden since they are not part of the syllabus and add extra work to their heavy schedules.

Reports suggest that SHEP issues are not covered in much depth in the curriculum. SHEP, CRDD and Teacher Education are in the process of carrying out a review of the School Health Curriculum. The SHEP division believes that a review of the teacher education curriculum is necessary to ensure that school health is properly addressed.

There have been no comprehensive evaluations of the SHEP programme. Some studies commissioned by UNICEF suggest that there is little activity within the SHEP programme and very little collaboration with the MOH. Ntow (2000) suggests a number of problems experienced by the SHEP programme:

- Most of the SHEP officers lack funds to carry out SHEP activities
- There is apathy among SHEP officers
- Lack of clear guidelines for intersectoral collaboration
- Lack of institutional capacity
- Lack of institutional capacity

Curriculum: School health is integrated in some of the curriculum including subjects such as integrated science, English, Moral and Religious Education, Social Studies Life skills at the Basic Level. School health is also integrated in home economics and life skills training at the SSS level. Reports suggest that SHEP issues are not covered in enough depth in the curriculum.

Teacher training: The SHEP division believes that a review of the teacher education curriculum is necessary to ensure that school health is properly addressed. Currently there is very little mentioned about school health issues in the teacher-training curriculum. SHEP has regional, district and school based co-ordinators. District SHEP Officers are given resource materials for training SHEP schoolteachers. Most of the in-service training has focussed on HIV/AIDS awareness creation. Officers complain of their inability to properly carry out activities due to lack of logistical support.

Financing: The SHEP programme was given support through the MTEF budget framework for the first time this year (2001/2002). In the past the SHEP officers were expected to solicit funds through the district assembly or the NGO community

Reports from officers at the National, Regional and District levels suggest that there is a general lack of commitment to SHEP implementation. The main problem appears to be the lack of resources directly allocated to SHEP officers at the District level to implement their programmes. Regional officers suggest that the challenges are: lack of policy framework, difficulty in monitoring and supervision, lack of interest by some GES officials to the SHEP programme, inactive regional and district SHEP steering committees, lack of funding and lack of sustainability of programming.

Key Recommendations

Stronger collaboration is needed between the MOE and MOH in planning and allocating resources to school health activities around the country. Since both Ministries are involved in the provision and implementation of School Health they should have a regular review of activities to plan out yearly activities. A common fund of resources should be used to carry out the Programme.

Sustainability*:* More emphasis should be placed on mobilising locally generated interest, resources and enthusiasm to ensure a safe and adequate learning environment for children. SHEP officers should use more IEC materials and locally produced materials to put messages across the school environment. District officers should use a 'Child friendly school model" as a basis for their activities.

Priority areas: The MOE's policy should ensure that all new school construction activities include a low cost and locally developed water and sanitation facility at each school is implemented. A systematic programme for

the provision of potable water in all schools should be ensured (GPRS, 2002; MOE, 2001).

School feeding programmes should be sustained through collaboration between the MOE and development partners particularly in areas where there are high levels of malnutrition among children. Programmes currently running through the Catholic Relief Programme supported by USAID and the World Food Programme in the northern regions should continue and extend to the primary and KG levels in rural areas.

The safety and security particularly of girl children should be made a key priority in all schools. SHEP officers should be trained to report cases of child abuse, and counsel colleagues on disciplinary action, which may cause the child harm.

GOG should ensure that free drugs are available for de-worming children on a regular basis and ensuring that vitamin A is given. The MOH and MOE should consult on the most systematic approach to the Programme allocating resources into a common pool and planning their strategies for SHEP on a yearly basis.

A regular budget allocation should be provided for the entire SHEP programme. District officers should receive a regular allocation on a yearly basis in order to carry out programmes. Allocations should be made once the district action plans are submitted and reviewed. This year (2001/2002) the SHEP programme was given support through the MTEF budget framework in the past the SHEP officers were expected to solicit funds through the District Assembly or the NGO community.

- Use of media campaigns alongside TV and FM stations allotting free airtime should be encouraged at national, regional and district level with support from the private sector. MOE and MOH should work closely with the media houses, students, musicians and artists to encourage involvement in the School Health Information delivery, education and communication programmes.

- SHEP should forge closer links with Whole School Development mechanisms for organising in-service training of teachers. There should be closer collaboration between the SHEP unit and the HIV/AIDS secretariat at the Ministry.

- Private and public sector linkages should be encouraged in order to support school health activities (i.e. Lever Brothers experience).

Many of the above mentioned activities do not require funding but motivated SHEP officers at the district and school level. Local durbars or fundraising activities should be organised to support the implementation of school health projects (i.e. low cost water and sanitation facilities, school farms and school feeding programmes).

5.5 Child Rights and Protection

This section examines the main issues related to child rights and protection and the challenges and strategies for overcoming the problems within the education sector. The section is a synthesis of the situational analysis and workshop report on Child Rights and Protection conducted as part of the ESR (2002).

The Convention on the Rights of the Child (CRC) places a responsibility on the state to take appropriate steps to protect children from all forms of physical, mental and sexual abuse through the establishment of protective, investigative and preventive services. Yet a high incidence of child abuse exists in schools, homes and market places (Fiscian, V.S. and Casely-Hayford, L. 2002).[20]

Predominant among the various forms of child rights abuses are:

- Defilement and sexual abuse
- Early and forced marriage and other negative cultural practices (female genital mutilation, trokosi etc)
- Harassment
- Harmful corporal punishment (particularly in schools)
- Abandonment, and intentional neglect
- Child abduction
- Child Labour and Commercial exploitation (sexual & domestic) and;
- Outright sale of children

Child Labour: Paragraph 32 of the labour decree states that, "No person who, in the opinion of the chief labour officer or a labour officer, is under the age of sixteen shall be capable of entering into contract for employment as a worker"**.** Nevertheless, as the evidence shows, the law has been ineffective and is out of touch with social and economic realities in Ghana today (UNICEF 1990:64). The GLSS-3 in 1995 reported that **7.8%** of 7 – 14 year olds and 31.5% of 15 – 19 year olds are economically active. According to UNICEF 2000, child labour is one of the main reasons why some children are not participating effectively in schooling.

Child Fostering Practices: Evidence from Northern Ghana suggests that one of the main reasons girls are unable to attend school is due to the child fostering practises in many of the northern communities (Casely-Hayford 2000). As a result, many of these children work to support themselves while they live with their caregivers. The problem of child maintenance and parental neglect is inter-linked with the child's ability to attend and stay in school (GNCC, 1997:23). For instance 7.1% of girls selling on the streets in Accra are neglected by their parents (Apt & Grieco, 1997).

[20] A child is abused, when other people infringe upon his/her rights. 'Abuse' is the legal term applied to children who are taken advantage of by an adult (and sometimes by another child) by virtue of his/her own benefit or gratification (Leach, F. Machakanja, P. with Mandoga, J. 2000).

Physical and Verbal Abuse: Recent research on abuse of girls in Ghanaian basic schools conducted by Fiscian V.S. and Casely-Hayford L. (2002)[21] revealed that teachers in the four case study schools (Central Region) propositioned 27.1% of girls. The Women and Juvenile Unit (WAJU) of the Ghana Police service between 1999 and November 2001 recorded 496 cases of defilement in the country[22]. Over half of the cases involve defilement of female children and the failure or refusal of a parent to supply their child with their basic needs (UNICEF, 2000:109).

Right to Education: The Ministry of Education is in the process of operationalising a national policy on child rights (Asiegbor and others, 2001:v). The 1992 constitution of Ghana makes basic education free and compulsory to all children. Nevertheless, not all children enjoy their rights to education. According to MOE/GES 2001, about 17% of Ghanaian children are denied their right to basic education.

The enforcement of the compulsory aspect of the right to education is however, enshrined in the general processes created under the CHRAJ mechanisms. Enforcement of CHRAJ's policy guidelines remains a challenge. District Education Offices require that head-teachers pay levies on each child that is enrolled in their schools; Children are often sent away for non-payment (MOE/GES 2001:42). This has created ambiguity concerning the "free nature of the policy" and ensuring the right of the child to basic education is upheld; it has also created a challenge to CHRAJ in enforcing its policy guidelines in ensuring basic education for all children.

Protective Policies and Legal Instruments

There is no national child rights and equity policy within the education sector to ensure that the rights and protection of children are ensured within the Education sector[23]. Ghana has responded positively to various Acts and policies and effected necessary constitutional provisions on the rights to education. Article 25(1) of the 1992 constitution for example is a replica of Article 13(2) of International Covenant on Economic, Social and Cultural Rights (ICESCR), Article 28 of the Convention on the Rights of the Child (CRC) and to a large extent Article 10 of Convention on Elimination of all Forms of Discrimination Against Women (CEDAW) – MOE/GES 2001:20 are the main legal documents ensuring the right and protection of children.

The challenge remains the government's ability to enforce and implement many of these acts, which require the legal instruments to ensure their enforcement. Public awareness is also required to educate people particularly parents on their legal rights and channels for seeking justice where incidences of abuse occur.

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[21] An Investigative study into the Abuse of Girls in Ghanaian Primary and Junior Secondary schools (2002) A University of Sussex/DFID–UK Commissioned study.
[22] The January 26 edition of the 'WEEKLY SPECTATOR' page 11.
[23] See Asiegbor, Fincham, Nanang, Gala and Britwum. November, 2001: V

District Education Offices require that head-teachers pay fees on each child that is enrolled in their schools; Children are often sent away for non-payment of levies (MOE/GES 2001:42). This has created ambiguity concerning the "free nature of the policy" and ensuring the right of the child to basic education is upheld; it has also created a challenge to CHRAJ in enforcing its policy guidelines in ensuring basic education for all children.

> *Under the current constitutional regime, article 25 of the 1992 constitution provides that: "All persons shall have the right to equal educational opportunities and facilities with a view to achieving the full realisation of that right" (MOE/GES2001: 19)*

The Ghana Education Service (GES) has some provisions within the 1995 GES Act – Act 506 that guides teachers' relationship with pupils. The Act however is not clear on issues of human rights violation. Section 9 (2) of this Act empowers the GES council to appoint in every district a District Oversight Committee[24] to oversee related issues of rights violations. Section 19(1) the GES Act provide the disciplinary proceedings for the Disciplinary Committee provided under section 9(4) in cases of disciplinary matters that may be referred to by the appointing authority. Apart from the provisions specified in sections 9 and 19, there is no other related provision under the Act, which seeks to promote child rights within the pre-tertiary education. There is also the Ghana National Association of Teachers' (GNAT) code of professional conduct, which has provisions that seek to promote and protect school children from human rights abuse. Annex 3 summarises the main Child Protection Policies by the MOE and Government of Ghana.

Under the 1995 GES Act – Act 506 empowers the **District Education Oversight Committees** to ensure the enforcement of the punitive measures as specified in the teachers' code of conduct. The fact still remains that the guidelines for punitive action as stated in the Teachers code of conduct are not explicit enough and limited by the provision, which restricts district disciplinary committees to referring serious cases of teacher misconduct to the national level when dismissal may be appropriate.

Curriculum

The revised social studies syllabus for Junior Secondary School also covers Human Rights abuses and mechanisms for preventing such abuses. Similarly at the senior secondary level, the issue of Rights and Responsibilities of Individuals are featured in the Social Studies syllabus. The implementation of the revised Social Studies syllabus commenced in the 2001/2002 academic year. This means that all those who passed through the basic and senior secondary education before the revision were denied access to human rights education. Another limitation here is that only teachers who teach environmental and social studies are exposed to teaching issues of human rights in school. Table 5 presents' details of the school curriculum on child rights related topics.

[24] See appendix I for functions of the committee

Teacher Training and Education

The Teacher Education Unit have the following challenges in ensuring effective Human Rights Education are integrated in their work:

- There is no separate subject at TTC's on child rights but they are integrated in some subjects such as Social Studies
- Teachers are not taught alternative forms of discipline apart from corporal punishment such as: Not allowing the child to have all the 15 minutes break, Letting the child write out sentences repetitively and limiting the child's privileges.

UNICEF and MOE are in the process of developing a teacher-training manual on Human Rights called "Promotion and Protection of Children's Human rights". The manual will be used for training teachers at Teacher Training Colleges across the country. The guidance & counselling programmes do not cover child rights issues. The policy only directs that co-ordinators are trained and placed in Senior Secondary Schools to offer services on vocation, career choices and psychosocial problems of students.

Legal Points and Mechanisms

Currently there is no functional legal point within the District Education Office, which is handling issues concerning Child Rights, and Protection. According to the MOE Policy the School health officers are mandated to assist in issues concerning child rights and protection but in practice more of these cases appear to be handled by the Girls' Education Officers or the District Directors of Education in difficult cases. Reports suggest that many of the District Education Oversight Committees (DEOC's) are weak and in some cases or non-functioning. The district education offices lack clear procedures in reporting child rights abuses making communities and parents wary of reporting such cases at the district offices.

There are several reasons for the current situation; these include lack of teacher training on human rights and equity within the classroom, and lack of clear guidelines for teachers, parents and pupils concerning issues of child rights. There is a lack of teaching and learning materials on human rights available in the classroom. The code of discipline for Basic School is at variance with current thinking on human rights and gender equity. Teachers' attitudes in schools inhibit "children's voices" when they are abused or discriminated against. There is also a lack of human rights and equity service points in schools to enable children who suffer abuse to seek redress and inadequate parental support in enforcing human rights in schools (Based on Asiegbor, 2002)

The research conducted on "Constitutional and Legal Framework for the Right to Pre Tertiary Education" (MOE/UNICEF, 2001) provides a comprehensive overview of issues and adjustments, which should be made to the New Legislation on Education from a human rights point of view. This research

suggests the need for MOE to institute the "compulsory" aspect of Basic Education and the proper mechanisms to ensure its enforcement. The report also suggests that corporal punishment should be expunged from the system and firmly settled by the legislation.

It also makes it clear that girls should be readmitted into school if withdrawn due to pregnancy after child delivery. One of the most important instruments, which can ensure that more rights are protected, are the proper and regular functioning of the District Education Oversight Committee.

Key Recommendations

- Counselling and legal service points should be set up at the district and school level to ensure the practice of child rights and gender equity in all schools. These legal points should be widely publicised to ensure that children and the public are able to report any forms of abuse.
- All corporal punishment should be abolished in schools (use of canes and other instruments) and a national campaign should begin through the media and TTC
- The Code of Professional Conduct should be reviewed and provide more detail as to the procedures for dealing with cases of abuse in schools. There should be stronger procedures for punishing teachers who have committed a sexual offence against a child (i.e. immediate dismissal).
- The district disciplinary committees should take up cases of child abuse and sexual offences within schools within one month of the offence. Disciplinary Committees at district and regional levels should be strengthened through regular monitoring at all levels.
- Curriculum should integrate issues of child rights issues in more depth. Modifications should be made to the following curriculum and should reflect the child's' felt needs and not solely those outlined in the Articles from the 1992 constitution
- District education offices should ask the assemblies to enforce laws on early marriage, child fostering and negative cultural and traditional practices, which prevent children from attending school.
- The MOE should sponsor a national media campaign to promote child rights and protection particularly focussed on the right to education and the practices, which violate this right (child labour, early marriage etc).
- The Children's Act should be widely disseminated through the use of information education and communication (IEC) Campaign particularly using the radio and TV.

Issues of Child Rights and Protection should be included in all teacher-training syllabuses. Teacher training should be intensified (pre service and in-service) to ensure that teachers are able to teach, practice human rights and identify situations which infringe on child rights at the home and school level. Teachers should be trained on alternative forms of disciplinary action instead of punishment through caning (i.e. taking away privileges and or asked to perform community service)

Conclusion

Several of the educational sub-sectors including girls education, special needs and schools health are integral components of any education system particularly one in a developing country context such as Ghana. Much more emphasis is needed to support these activities, which are essential to the holistic development of the child particularly at the early years.

More work is needed to ensure the close coordination between these different areas of the MOE's work. School health and HIV programmes should be closely consulting on all their programmes in order to ensure harmony and support to the often-limited capacity of district and community level institutions. Key to ensuring a better quality of education and a higher level of educational attainment for particularly rural children will be the enhanced cooperation of the MOE with the Ministry of Health, Ministry of Women and Children's Affairs and the Ghana Poverty Reduction Secretariat.

Chapter Six: Creating a Literate Learning Environment

Introduction

In addition to the community as a source and resource for quality education, this chapter examines the effect of extra-school conditions on quality teaching and learning based on the belief that the outside environment directly influences the situation inside the classroom. The assertion feeds into the GPRS assumption of a linkage between educational achievement and increased opportunity for improvement in the individual's economic and social well being.

In more direct terms: "There is need to sustain literacy skills through the creation of a literate environment" (World Bank, May 18,1999:2). That is, schooling is important in as much as it is the fertile field in which the seeds of cognitive (reading, writing, comprehension and numeracy) skills are sown and nursed for transplantation and application to yield improvement in a community's living conditions. Effectively, the learning environment is interpreted here as teaching and learning facilities available both in the school and within the community.

A reading culture is one of the key ingredients and contributing factors that enhance teaching and learning, which creates an atmosphere where children talk regularly about books and their content. Libraries and affordable book prices constitute another form of support and expectation for creating a literate society. Also, certain aspects of curricula and syllabuses must be rooted in the local environment in pursuance of relevance of school content. A close relationship between language of instruction and everyday language use is required.

Basic facilities such as water, well-equipped classrooms and edutainment-oriented recreational activities are other logical necessities for quality schooling. The Education Act of 1961 currently regulates the provision of educational services. Portions of legal instruments such as the Local Government Act and Child Rights Act regulate aspects of education. However, there are several aspects of the practice of education, which are not regulated. These issues in various respects challenge the education sector in its design and attempt to provide quality education for all pupils and students.

6.1 The Challenges

Current MOE recognition of the context of teaching and learning is unarticulated in any single policy document. Neither is it manifest in any coherent strategy, programme or project implementation. This challenge is reflected in inequities in the allocation and distribution of resources to schools. Indeed, awareness of the importance of the environment as a key condition for successful schools and schooling features in only some programmes and

projects (such as the WSD and QUIPS). Yet detailed knowledge of the social milieu in which a school is sited is absolutely necessary for sound and effective education planning and the setting of standards as well as ensuring equity and achievement in the system.

Book Supply and Reading

Reading is the foundation for independent learning. It is the basic tool for acquiring extra-classroom knowledge which constitutes the greater part of the individual's accumulated knowledge repertoire. Studies by Pryor and Ampiah (2001), and others identify lack of a reading culture among the key quality issues confronting Ghanaian schools. In the current system, book supply policy and the poor process of book dissemination is such that it is possible for a child to go through the entire basic education system without owning a single book.

Mass education all over the world is frustrated by difficulties in assisting the majority of children to read. Obstacles for rural children wanting to acquire reading skills from a Ghanaian language environment and having to move into a school system which most often operated in the English creates a challenge for many Ghanaian schools. For instance the ASTEP effort is one of the few large-scale programmes supporting the local reading culture and capacity of the children to read in their mother tongue.

In 1998, under the MOE's "Books Scheme for Basic Schools," DFID undertook to supply supplementary "reading books for all children in the 11,000 government primary schools in Ghana" ("The Books Scheme for Basic Schools"). The scheme was very effective as books were distributed to JSS schools under the book scheme. More such schemes should be augmented to ensure that projects support the basic needs of children, which are often the possession of one book. The ESR team found that more resources need to be focused on ensuring that children are given at least one new book per term.

Textbook Policy and Book Development

Unless there are books to enable the teaching of reading and writing skills, the target of the EFA by 2015 will not be realised nor sustained; a situation that would mean a resurgence of illiteracy. The MOE should begin to promote the Ghanaian book industry in order to actively promote the Ghanaian language text for literal translation into English. In order to promote indigenous knowledge in teaching and supporting the identify of the Ghanaian child the MOE should promote the purchase of Ghanaian textbooks and revitalise the entire Ghanaian book industry. This will also have a positive impact on the academic and literacy society within Ghana.

At the moment, there isn't enough reading material to help sustain literacy skills acquired by children who have just become literate in the school context. Books are either unavailable or too expensive for members of poor

communities whose income fall below US$1.00 a day. Both the GPRS (February 2002) and GSS (October, 2000:7) placed the rate of poverty at 40 percent in 1998-1999.

Operations of the EPP and the Ghana Book Trust (GBT), which sell books at moderate and affordable prices, have so far been limited to a few cities. Also, for some time now, creative writing in the country has been slow. The reason often expressed by potential writers is that writing does not pay.

Just like the basic education system itself, children are "undernourished," in reading and teacher education is also afflicted by a "textbook famine" (Mr. Nsowa, Director of Teacher Education, GES in an interview, Sept. 15, 2002).

By several indications, the public library system as operated by the Ghana Library Board (GLB) has is in serious trouble due to poor management, lack of funding and resources---it is not currently providing satisfactory under the decentralised district assembly system. The Board is detached from and uninformed about where revenue is generated for spending on library projects.

6.2 Localised Aspects of Curriculum and Syllabuses

The ESR team recognised that Ghana's ability to add value to what is locally abundant is key to carving a niche in the international marketplace. The latter requires knowledge about and sensitivity towards the local environment that would lead to the discovery of the saleable product.

Current curriculum content is "over-globalised" in the sense that it does not connect the local economy to the pressing needs of Ghanaian society. Studies such as Pryor and Ampiah (2001) show that the school is more of a push factor for out migration from the village than inculcating into pupils sensitising skills that can be applied to the harnessing of local talent and resources for the transformation of the local economy. The Kayayo phenomenon is a very prominent example of the large-scale exodus of girls from the northern regions of the country in search of "eye openness" or exposure to urban life.

The current system operates in such a manner that the basic education (JSS3) exit point is coterminous with exit from the community. It is possible for a parent to question the education system in the following manner "If I take my child to school, who will take care of the animals?" or "How on earth is the village-based vocational school graduate going to make a living out of cake baking, sewing or hairdressing vocation?" Satisfactory answers to these queries border on curriculum relevance and on the need for a more demand driven and indigenous approach to school curricula and syllabuses.

Child labour has largely been negatively linked to school attendance with "proportionately, more boys attending school and employed on the household farm, and proportionately more girls working for a household enterprise, or

engaged in housework in both cases the child's learning time and capacity seems to diminish (Heady 2000:4)."

These queries by consumers (actual and potential) of the school's product are challenges to which the school must respond if it is to attain acceptable qualitative standards and deepen its relevance to the pressing problems of society.

6.3 Language of Instruction, Communication and IT Integration

The issue of language of instruction is intertwined with the issue of educational opportunity, inclusiveness and equity. Implied in all of this is performance and selection. Currently, there is intense national debate over which language is to be used for school instruction, especially at the pre-school and lower primary level. Cabinet's decision to adopt English as the sole medium of instruction has changed the longstanding local language policy as the language for instruction for the first three years of schooling as announced by the Minister of Education (*Daily Graphic*, Friday, May 17, 2002, pp. 1&3). For many rural Ghanaian families and stakeholders the change to English may be an acceptable policy but for the experts around the world, mother tongue language is inextricably linked to cultural identity, self-esteem and the efficacy in life long learning.

The change in policy has, however, only intensified the debate over whether the child's mother tongue should be used in classroom instruction. Many language experts [25]have challenged the "English only" policy decision often citing the common learning principle of transference based on proceeding from the known to the unknown.

The new policy of English as the only medium of instruction at all levels of schooling needs to be evaluated against the efforts of ASTEP to promote the local language policy. The policy also seems to have upstaged the "Ghanaian Language Instruction Module" that QUIPS was working with CRDD, TED and WSD to develop (QUIPS Joint Program... 2002, p. 14; Okine, Friday, May 17, 2002).

Communication Media and Intra-/Extra-Classroom Learning

In addition to the benefit of serving as a source of academic learning, media contributions through school-based programmes can and are a good complement and supplement to the curriculum. Even as an informal learning mechanism, it can complement the content of SHEP and provide instruction on democratic values. In-classroom instruction can also be broadcast from a distance through radio and TV. This is currently an approach being planned by the President's Special Initiative on Distance Learning. During the 1960s

[25] for example, a group of lecturers from the University of Ghana, *Daily Graphic*, May 17, 2002 and the UCEW Centre for the Advocacy on Language and Culture (CALC) *Daily Graphic*, Tuesday, March 19, 2002,

and 1970s, Mathematics, Geography, Science, History and English lessons were transmitted from the radio and television station to be received in classrooms, homes and offices across the country.

The digital divide between Ghana and other nations that have advanced in computer technology is apparent in the divide between Ghana's urban and rural context. While it is possible for school children at Madina (a developing area in urban Accra) to queue up to use Internet cafes, several rural children may not have even heard of the computer.

However, improvements in communications technology and the upsurge in private sector "telephone communication centres" have taken the Internet to several regional centres. There is also the presidential initiative to develop tele-centres for distance education and other communication applications. These initiative and developments have placed less emphasis on improving teaching and learning as beneficiaries of IT facilities. The MOE and GES should consider Public/Private Partnerships to promote IT particularly at the second cycle and tertiary level education. Primary and JSS should be provided with basic radio receivers.

6.4 School Infrastructure

Classrooms, lecture theatres and other learning spaces are in serious shortage at all levels of schooling. Many rural basic schools are deprived of toilet facilities, water and suffer from poor lighting and are often sheltered in dangerous and life-threatening structures.

However, to comply with the EFA deadline of 2015 the MOE/GES must construct proper classrooms with the basic furniture, water and books for every school by 2009--- based on Primary 6 as the level at which basic literacy would have been achieved.

Teacher accommodation is a recurrent problem referred to before by the Kwapong Report and many times since. Accommodation must not be seen simply as an incentive but a necessity for schools in all deprived areas where attracting and retaining teachers is an acute problem. Teacher accommodation projects must be planned in a participatory manner ensuring that the most cost-effective approaches that insure basic facilities such as water and in some cases gas lamps will have to be provided as part of the package.

Many studies suggest that water affects teacher and pupil lateness and absenteeism as well as diseases such as guinea worm infection, which are often responsible for the inability of both teachers and pupils to perform. In many rural communities, water is usually disease-ridden, scarce or unavailable to the extent that pupils spend considerable amount of time fetching it. This is particularly true in the case of girls in the northern regions who often have less contact time in the classroom due to their water fetching activities.

Various studies by UNICEF and the GLSS indicate some pupils have to travel long distances to and from school daily. The majority of children in Okwenya primary school (located near Somanya in the Eastern region) choose to attend school at Somanya (four kilometres away). The classroom in Okwenya was constructed " from neem sticks and leaves and no longer capable of serving its purpose" (*Ghanaian Chronicle*, Monday, February 11, 2002:4). This condition causes tiredness, lateness and even truancy of pupils.

According to the "Report of the Ministry of Education Committee on the Encroachment of School Lands" (MOE, August 2000), many educational institutions are facing land encroachment problems. The report identifies the nature of the problem and possible solutions.

Exposure of children to inappropriate video films often contributes to indiscipline and unacceptable behaviour in the classroom and is a significant worry for many communities. Even worse, the video has become an instrument, which distracts children from learning particularly after school since it is often the only source of recreation and entertainment for pupils in village communities. Most disturbing is the growing level of violence and sexual abuse on the local films, which project a very negative image of the girl child. An urgent intervention is needed by Government and key stakeholders to ensure that the private sector film industry in both Ghana and abroad do not further denigrate the Ghanaian woman.

6.5 Total Resource Mobilisation

Currently, social groups including traditional authorities, old students, and religious bodies etc who exist within communities are hardly recognised by school authorities. There is a need to institutionalise finance and resource mobilization, inputs, expertise by creating a schedule for district officers who can coordinate donations by Alumni, Old Students, Out-of-Town and Diaspora citizens, Traditional Council scholarship, asafo, youth associations and other social groupings within the community and district.

Some DCE's have called on traditional leaders "to join forces to check the falling standard of education in the district...." Many assemblies cannot support educational needs of the district alone. The District Education Oversight Committees should be encouraged to appeal to chiefs, opinion leaders, youth groups, and churches to support school enrolment drive. In spite of the fact that some parents are unable to support their children at all levels of schooling, scarce state resources should be better targeted to the neediest children and their families living in deprived rural areas. Studies such as the deprivation research by MOE and the GPRS should guide the Ministry in better targeting its resources and programmes to public schools in the most needy areas.

Statistical data from Orivel (2002) indicate considerable wastage and attrition in the system. For example the dropout rate is high and completion rates are

low. An unpleasant and costly consequence of the failure of the education system is streetism and juvenile delinquency. The cost of not injecting a higher quality of resources (i.e. books and literature) into the current basic education system could result in an even higher cost to the state by JSS leavers losing their basic literacy skills and becoming less productive citizens.

Research and Documentation

The main challenges to the Education system are the improvement of quality through a strong focus on literacy and numeracy. The MOE has a responsibility to build educational research capacity in all universities to explore:

- Language and basic education
- Science and Ghanaian culture
- Reading problems and reading methodology
- Testing and Assessment in Ghanaian schools

Research on teaching and learning is one of the components identified as hampering the EFA process in most countries and disabling higher levels of education (World Bank, August 2001). This implies two things: that research capacity needs strengthening at the higher levels of education and that research on teaching and learning is required for sound basic education policy formulation and implementation. At the moment, there is no mechanism in the MOE for planning and initiating policy research that will inform and enrich decision-making.

6.6 Key Recommendations

Language of Instruction, Communication and IT Integration

The MOE must review its language policy as a primary step to supporting the culture of reading and writing. There should be a national debate on the issue in order for experts, teachers and the public to come to some level of consensus. This will be imperative for effective implementation.

A stronger thrust in encouraging and using the local book industry is needed. Some of the other recommended activities are the following

- A systematic approach to scaling up book distribution is critically needed. The MOE should begin by having a regional and district based annual planning process for identifying the needs and requirements of each district regarding books.

- Private sector agencies and the NGO sector should be encourage and supported to develop children's magazines, newspapers and book particularly in the local language. The EPP needs to be encouraged to expand its activities to cover all District capitals and Ghana Book Trust (GBT) must operate at all regional capitals.

- The National Commission on Culture must team up with the Book Development Council, the Ghana Writers Association, Ghana Publishing Company, Publishers Association and others from the private sector to revive writing and publishing for Ghanaian Schools.

- Every effort must be made to make book prices affordable
- The Ministry of Communications and the Ministry of Education should exert pressure on the Media commission to ensure that films and videos are not projecting violence and negative female images where possible. National Commission on Culture must support filmmakers to produce book-based films especially relevant to children.

- Children need to be exposed to the book/reading environment. The Government must ensure that at least one book per term is provided to children across the country particularly in environments such as the north and deprived rural areas.

- NGOs should be encouraged to support the library and its programmes. Teachers should be encouraged to use books, reading materials and local libraries as part of their regular school programmes.

Creating a literate and reading society

The MOE should institute a **permanent national reading campaign** in all districts of the country with active community support and media promotion. This campaign should be supported through private public sector linkages and sponsored to ensure that activities such as district wide reading and creative writing competitions are fully financed. This campaign should monitor the level of literacy in each district and publicly report on achievements, which have been made to eradicate illiteracy

- NGO's should be supported to assist in mobilising school/communities in such a campaign nation wide. Teachers must also be fully involved in the planning and implementation of this programme.

- Reading Charts for monitoring reading of pupils must be reintroduced and monitored by Circuit Supervisors in their inspection exercises.

- Reading competitions must be institutionalised using radio and television and encouraging them to develop programmes which serve the rural child. Reading clubs could also be developed as part of creating a literacy education programme.

- The media (radio and television stations) must develop and broadcast reading programmes and promote reading.

Library Development

- An ad hoc library system in the form of "Bring-a-Book-Take-a-Book" must be organised and implemented at offices, workplaces, schools and even homes. This could be achieved with a related programme that ensures that every primary school child is supplied with and made to own at least one supplementary reader each term.

- District mobile libraries must be established to promote greater access to books and in support of District Libraries.

- The Ghana Library Board (GLB) should be phased out and made to focus on implementing a high quality national library. District Assemblies and communities need to be encouraged to establish well-stocked libraries. The GLB must be reorganised as the National Library of Ghana (NLG), which would restrict itself to the functions of a national library including developing national union lists of the holdings of all libraries and the installation of a national network of online links. In addition, it would provide technical skill training for librarians engaged at the District level.

Localised Aspects of Curriculum and Syllabuses

- A realistic approach to solving the problem of deepening local curriculum and content relevance will be crucial in the coming years. This approach would involve tailoring aspects of the syllabus to the local economy and developmental context to ensure that the skills inculcated into the individual children are applicable to the local context and needs of society.

- School timetable may also be adjusted to accommodate difficult circumstances (i.e. shepherding and farm labour).

- SMCs and other governing bodies should receive technical advice from curriculum experts so they can provide localise content input to curriculum and syllabus design

Communication Media and Learning (Intra- /Extra-Classroom)

Media (radio) receiving sets could help in delivering lessons to classrooms without teachers as a way of ameliorating the teacher shortage and poor performance situation. DEOs may purchase TV sets & VCRs for rental by schools.

- The development of hi-tech literacy as envisaged in the presidential initiative on tele-centres needs, however, to be matched against print material in terms of cost-effectiveness.

- All teacher training colleges and secondary/technical/vocational schools and DEOs must have telephone facilities in order to facilitate the use of internet services.

- Each school must have at least one PC.

Photocopier machines or at the minimum cyclostyling machines need to be installed at DEOs for use by schools that may not have the facility. This review encountered situations where some JSS students saw printed BECE questions for the first time during the actual examination.

A technology workshop clinic developed in cooperation with the Ministry of Communications and Technology (MCT) and along the lines of the STME would stimulate interest in inventions among the young.

School Infrastructure

- Attempts should be made to either rebuild damaged school structures or to ensure that new schools are properly constructed. In constructing new structures, consideration must be given to integrating the architecture of the school into that of the community. Schools must also be fitted with water and sanitation facilities.

- Pavilion-type classroom structures need to be provided with adequate windows for light and emergency exit outlets.

Furniture

- Efforts should be accelerated to ensure a strong, durable and properly designed furniture suitable for learning is available particularly in rural settings. It must be ensured that all new schools are provided with tables and chairs before occupancy.

Teacher Accommodation

- Ongoing efforts to provide teacher accommodation must be intensified. In rural deprived communities, teacher accommodation structures must be considered part of the school structure. Wherever and whenever teacher accommodation is provided, rent (even if nominal) must be charged as a contribution to maintenance costs. Participatory approaches to this must be made.

- The question of lack of accommodation for DDEs must be addressed in order to attract heads that have proven their administrative capacities to move into the DDE position with their experience.

Water

- No school should operate without a regular water supply facility. An "Each-School-At-Least-One-Borehole" programme is an alternative.

- In addition, serious consideration must be given to constructing facilities for rain harvesting for schools in communities faced with frequent water shortages or protracted scarcity.

Transportation/ School Children's Bus

- It is recommended that wherever children are compelled to travel long distances to school and whenever it is determined to be cost-effective, the DA/DEOC in conjunction with the SMC and PTA must organise transportation facilities for which children will pay fares part of which will be borne by the DA.

Security

- Prescribed solutions to the land encroachment problem confronting educational institutions include: a) proper acquisition of the land (by private treaty or compulsorily), b) prompt payment of acquired land, c) demarcation (cadastral plans, boundary pillar markings, construction of roads, developing along the boundary, sandcrete walling), d) proper record keeping, e) utilisation of unused land, f) training programme of heads of institutions (with a prepared handbook), and establishing a desk office at the MOE/GES to see to the implementation and administration (MOE, 2000).

- In addition, wherever and whenever affordable, teacher training colleges and secondary schools as well as lower level schools should construct fence walls.

Recreational Facilities

- To increase pupils' attention to books and learning, communities must be encouraged and assisted to provide alternative education enhancing recreational facilities.

- SMC's and PTA's should be encouraged to develop entertainment for children and adolescents and ensure their supervision.

Research and Documentation

- MOE/GES must consider periodic research into "conducive learning and teaching environment" as a way of monitoring conditions conducive to quality teaching and learning.

- Another area that would benefit from MOE research is the assessment of financial implications and local relevance of DP/NGO projects and programmes.

- DEOCs must develop in conjunction with SMCs and PTAs, a reporting instrument that would detail the state of conditions that militate against learning. CPCs would then coordinate with heads to complete and submit the reports for analysis. As much as heads may be "overburdened" with reporting, this is a device that will encourage the school to look both within itself and outside in an attempt to provide quality education.

- EMIS must be made to effectively function at the district level

There is an urgent need for new legislation to regulate the provision of educational services in Ghana. The Education Act of 1961 has been overtaken by time. From the perspective of this review, any new legislation must recognise the need for sector wide approach to education delivery to facilitate coordination and cooperation among sub-sectors and units as well as an integration of programmes to eliminate costs associated with duplication.

6.7 Summary

This review recognises the need for an enabling environment for successful and quality teaching and learning. Enablement is through the creation of a reading-friendly environment in which books are available and affordable. But it is also the provision of basic inputs and structures that support teaching and learning. A sector wide approach to education delivery would accordingly need to focus on these issues and especially the use of language familiar to learners for instruction, rooting the curriculum in the local economy for relevance and continuing research to keep analysing these issues.