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A Research Programme Consortium on
Implementing Education Quality in Low Income Countries

A REVIEW ON THE CONCEPT OF QUALITY IN EDUCATION: PERSPECTIVES FROM GHANA

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ABBREVIATIONS

ADEA - Association for the Development of Education in Africa

BECE - Basic Education Certificate Examination

CRIQPEG - Centre for Research into the Quality of Primary Education in Ghana

DTST - District Teacher Support Team

EFA - Education for All

EARC - Educational Assessment and Research Centre

FCUBE - Free and Compulsory Universal Basic Education

GTZ - German Agency for Technical Co-operation

GES - Ghana Education Service

MLG - Ghana's Ministry of Local Government

HND - Higher National Diploma

IEPA - Institute for Educational Planning and Administration

JICA - Japan International Cooperation Agency

JEM - Journal of Educational Management

JSS - Junior Secondary Schools

NUFFIC - Netherlands Universities Fund for International Collaboration

PMT - Performance Monitoring Test

QUIPS - Quality Improvement in Primary Schools

SMC - School Management Committee

SPAM - School Performance Appraisal Meeting

STME - Science Technology and Mathematics Education

SSSCE - Senior Secondary School Certificate Examination

WSD - Whole School Development Programme

UNESCO - United Nations Educational, Scientific and Cultural Organization

UNICEF - The United Nations Children's Fund

INTRODUCTION

> *The desire or enthusiasm to access school education in order to acquire knowledge, skills, and new tools of analysis, is one thing; to actually succeed in acquiring them and showing evidence in having acquired them in concrete terms is quite another … The quality of the products of an institution or a programme is often evidenced in the quality of performance of the products …* (Gyekye, 2002:28)

Quality in education is now crucial in Africa's strategic plans towards catching up with the developed world. While the notion of quality and priority foci may differ from country to country, the term has become a determining factor in facilitating international support for educational expansion and developmental initiatives. Understanding the geographical context of quality in education, what its indicators are within the cultural milieu of particular countries, the challenges associated with implementing quality education are therefore significant. Increasingly successive governments in Ghana have sought and continued to seek strategies for quality delivery of education. Yet, in the country, locally research-based literature on issues related to quality in education is limited.

This document reviews available Ghanaian generated literature that throws light on some quality issues in education. The review also draws on some literature from Europe and America and on research and analyses of quality education in other African countries.

1. THE LITERATURE SEARCH

Our literature search was guided by the following questions:

1. What are the interpretations given to the notion of quality in Ghana?
2. Which categories of individuals, groups or communities are disadvantaged with respect to quality education in Ghana?
3. Are there any examples of successful implementation of quality improvement initiative(s) in Ghana?
4. What are the challenges of mainstreaming quality education in Ghana?
5. Are there any experiences of capacity-strengthening within international collaborations in Ghana?
6. Are there any experiences of evaluation within international collaborators in Ghana?

2. SOURCES OF EVIDENCE

Information was gathered from the following sources:

- Government policy documents and circulars, discussion with Chairman of 2002 education review committee as well as personnel of the Ghana Education Service. Government policy documents are a valuable source of determining the philosophy and indicators of quality priority areas in Ghana.
- Library search for books, chapters in books, Journal articles and conference/workshop papers on quality education related issues. Indigenous literature on quality education is limited. The Journal of Educational Management (JEM), and the Makerere Journal for Higher Education were valuable sources of information. Few international Journals were also consulted.
- Research findings of education-related Non-Governmental Associations and Research Centres [*Association for the Development of Education in Africa* (ADEA), *Centre for*

Research into the Quality of Primary Education in Ghana (CRIQPEG), *Quality Improvement in Primary Schools* (QUIPS) etc]
- Media commentaries and releases as well as informal discussions with individuals associated with school effectiveness and improvement policies in Ghana.
- Outcomes of the National Consultative Workshop on Implementing Quality Education in Ghana

The main ideas emerging from each source were compared for the purposes of extracting the major themes from the literature.

3. THE PROBLEM OF DEFINITION

The concept of *quality is* very evasive. It is perplexing to define and often difficult to come by an agreed formal definition for the term. One person's idea of quality often conflicts with another and, as we are all too aware, no two experts ever come to the same conclusions when discussing what makes an excellent school, college or university. As Sallis (1996) puts it:

> We all know quality when we experience it, but describing and explaining it is a more difficult task. In our everyday life we usually take quality for granted, especially when it is regularly provided. Yet we are all too acutely aware when it is lacking. We often only recognized the importance of quality when we experience the frustration and time wasting associated with its absence.

In Ghana, like elsewhere, quality in education faces definitional problems. It becomes more problematic when quality is conceptualized in terms of a particular aspect of education because as Dare (2005) observes, 'all the elements associated with educational quality are interrelated. A serious defect in one element is likely to have implications for quality in others'. Moreover, questions regarding quality may be posed about any important aspect of the educational system: infrastructure, school buildings, administration, leadership, management, teacher training, educational materials, teaching, or student achievement.

More problems arise when the outcomes of education are the focus for defining quality. This is because purposes of education are culturally bound and value-laden. For example, for some people, the purpose of education is to foster students' cognitive, moral, and social development; for others it is a means of promoting social cohesion and nation building; while for some others, it is a preparation for the world of work. This complex situation makes even agreement on quality assessment results problematic. This is reflected in ADEA's (2004) observation that 'Quality assessment is one of the thorniest governance issues in most universities partly because most universities cannot agree on the mechanisms for the assessment' (p.63-64).

Perhaps, a more simplified solution to the definitional problem lies in Harvey's (1995) linkage of quality to transformation. In this sense, quality education is narrowed to 'qualitative change.' Yet this does not resolve the problem. Viewed this way, the notion of quality becomes more perplexing when applied to education (Elton, 1992). This is because Education is an ongoing process of transformation of the participant: the student, learner or researcher. In this light, the achievement of universal participation in education will be fundamentally dependent upon the quality of education available. A plethora of studies have shown that how well pupils are taught and how much they learn, can have a crucial impact on the effectiveness of school education they get. Furthermore, whether parents send their children to school at all is likely to depend on judgments they make about the quality of teaching and learning provided. As an example, many parents want their daughters who go through the Basic Education Certificate Examination (BECE) in Ghana to attend Wesley Girls Senior Secondary School in the Central Region just because this school has been at the top of the country's league table for three consecutive years. By being on top of the league table, it is assumed that teaching and learning in the school is of higher quality.

3.1 A Matter of Agreement

At the level of international debate and action three principles tend to be broadly shared. These are the need to understand quality education in terms of (a) content relevance, (b) access and outcome and (c) observance of individual rights. In much current international thinking, these principles are expected to guide and inform educational content and processes and also represent more general social goals to which education itself should contribute. This is reflected in the thinking of the following international bodies:

UNICEF: recognizes five dimensions of quality: the learners, the environments, content, processes and outcomes, founded on the rights of the whole child, and all children, to survival, protection, development and participation (UNICEF, 2000).

UNESCO's understanding of education quality seeks to identify unambiguously the important attributes or qualities of education that can best ensure that goals are actually met. Quality education should encourage learner's creative and emotional development, in supporting objectives of peace citizenship and security, promoting equality and passing global and local cultural values down to future generations. It should allow children to reach their fullest potential in terms of cognitive, emotional and creative capacities. Improving the quality of education would require systems in which the principles of scientific development and modernization could be learned in ways that respect learners' socio-cultural contexts. Thus, a quality education system must manage to provide all children and young people with a comprehensive education and with an appropriate preparation for working life, life in society and private life. This should be achieved without distinctions of any kind such as those based on parents' income, colour, gender, language, religion, political and other opinion, national or social origin.

Underpinning UNESCO's quality education framework is a four-fold principle of learning (Delors, 1996) as illustrated below:

Type	Principle
Learning to Know	Acknowledging that quality learning provides opportunities for learners to build their own knowledge daily combining indigenous and external elements
Learning to Do	Opportunities for learners to apply what they learn
Learning to Live Together	Developing in learners attitudes free from discrimination, where all have equal opportunities to develop themselves, their families and their communities
Learning to develop skills	Emphasis on skills required for developing individuals' full potential

This conceptualization of education provides an integrated and a comprehensive view of learning and, therefore, of what constitutes education quality.

3.2 The Jomtien Declaration and Dakar Framework For Action

The World Declaration on Education for All (EFA), in 1990, identified quality as a prerequisite for achieving the fundamental goal of equity. While the notion of quality was not fully developed, it was recognized that expanding access alone would be insufficient for education to contribute fully to the development of the individual and society. Emphasis was accordingly placed on assuring an increase in children's cognitive development by improving the quality of their education. Similarly, the 2000 Dakar Framework for Action affirmed that quality was '*at the heart of education*' – a fundamental determinant of enrolment, retention and achievement. Its expanded definition of quality set out the *desirable characteristics* of learners (healthy, motivated students), *processes* (competent teachers using active pedagogies), *content* (relevant curricula) and *systems* (good governance and equitable resource allocation). Although this established an agenda for achieving good education quality, it did not ascribe any relative weighting to the various dimensions identified. Thus, the Dakar forum emphasized the need to "improve all aspects of quality of education to achieve recognized and measurable learning outcomes for all-especially in literacy, numeracy and essential life skills" (Dakar Framework for Action, Article 7, World Education Forum 2000).

4. DIMENSIONS OF EDUCATION QUALITY

The following dimensions of education quality emerge from the literature:

4.1 Learner Characteristics

How people learn - and how quickly - is strongly influenced by their capacities and experience. Assessments of the quality of education outputs should not ignore initial differences among learners. Important determining characteristics can include cultural and religious background and the amount and nature of prior learning. It is therefore important that potential inequalities among students, deriving from gender, disability, race and ethnicity, HIV/AIDS status and situations of emergency are recognized. These differences in learner characteristics often require special responses if quality is to be improved.

4.2 Context

Links between education and society are strong and each influences the other. Education can help change society by improving and strengthening skills, values, communications, mobility (link with personal opportunity and prosperity) personal prosperity and freedom. However, education usually reflects society rather strongly: The values and attitudes that inform it (education) are those of society at large. Equally important is whether education takes place in the context of an affluent society or one where poverty is widespread. In the latter case, opportunities to increase resource for education are likely to be constrained.

More directly, national policies for education also provide an influential context. For example, goals and standards, curricula and teacher policies set the enabling conditions within which educational practice occurs. These contextual circumstances have an important potential influence upon education quality.

4.3 Enabling Inputs

The success of teaching and learning is likely to be strongly influenced by the resources made available to support the process and the direct ways in which these resources are managed. It is obvious that schools without teachers, textbooks or learning materials will not be able to do an effective job. In that sense resources are important for education quality – although how and to what extent this is so have not yet been fully determined. Inputs are enabling in that they undersign and are intrinsically interrelated to teaching and learning processes, which in turn affect the range and the type of inputs used and how effectively they are employed. The main input variables are *material resources* (textbooks, classrooms, libraries, school facilities and other non-human resources) and (*human resources* (*managers, headteachers, teachers, supervisors, and support staff*) with the management of these resources as an important additional dimension.

5. INDICATORS OF EDUCATION QUALITY

The literature so far suggests that quality is both a quantitative and a qualitative issue. Its indicators should therefore convey notions of quantity and quality (Dare, 2005). Van den Berghe (1997) defines quality indicators of education as performance indicators that refer to a quality characteristic or objective, thus alluding to the broad context of performance evaluation in which the learners operate. It may also be understood in terms of a figure that describes quality characteristic or the achievement of quality objectives. In matters of indicators therefore, concepts such as efficiency, relevance, importance and adequacy cannot be ignored.

In his presentation at the EdQual National Consultative Workshop, Ankomah (2005) provides a continuum comprising three main steps necessary for identifying indicators in educational quality:

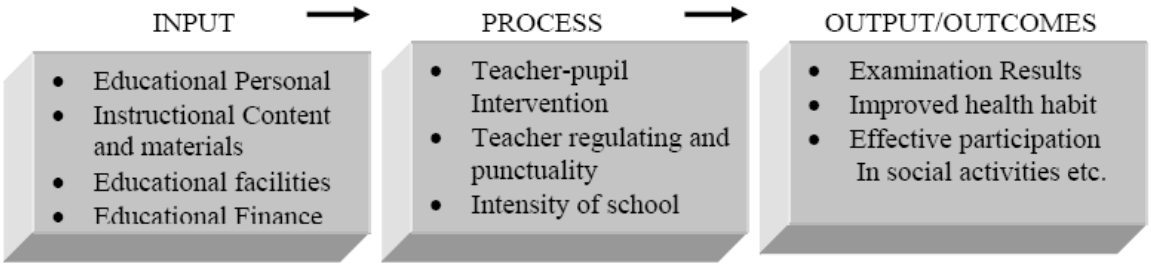

Fig 1: Educational Quality Continuum

5.1 Inputs

The nature and quality of the inputs significantly determine the outcome of educational provision.

• Educational Personnel: These include teachers and the non-teaching staff. But teachers constitute the principal factor in educational provision and thus affect the quality of education in a significant way. Attributes of concern include number of teachers available, pupils-teacher ratios, and the personal characteristics of the individual teachers. The personal characteristics include academic qualification, pedagogical training, content knowledge, ability or aptitude, as well as years of service/experience.

• Instructional Content and Materials

The content of education is critical in determining learning outcomes. The type, relevance and the volume are important. The materials that support teaching and learning, their type, quality and quantity impact significantly on the quality of education.

• Educational Facilities

These are about school space and equipment including classroom and other buildings, challenging boards, pupil and teacher furniture (tables and chairs), places of convenience, water, etc. The standard of construction, the conditions of the facilities and the specialized rooms are all important areas to consider.

• Educational Finance

An important input that influences all the other inputs is finance, which is categorized as capital and recurrent expenditures. Constructions of classroom buildings constitute one of the major capital expenditures of education while salaries, particularly of teachers, represent the most important aspect of recurrent education expenditure.

5.2 Process

The process component of the equality continuum relates to such aspects as teacher-pupil interaction, class management and control and daily teacher time-on-task with the class. It also concerns the regularity and punctuality of the teacher in the school for instructional activities. Furthermore, it includes the intensity of operation which has to do with length of the school day and term, how many days are effectively available for school work in a term, etc.

5.3 Output\Outcomes

The main output of educational service that constitutes the immediate evidence of quality is the achievement of students in examinations. For many, including parents, the performance of students in national level or standardized examinations is a sufficient indication of what quality education has been provided. When, for instance, people talk of fallen standards in education, they are basing their assertion principally on some poor examination results. But quality of the education service is also indexed by such non-measurable outcomes as improved health habits, effective participation in social and political activities, etc. Dare (2005) further proposed the following formula for determining critical quality indicators in education:

Formula for Determining Indicators of Education Quality

Indicator		Objective	Formula
1.	Student-teacher ratio	To measure the quality of education	**Number of students** / Number of teachers.
2.	Class size	To measure quality of education	**Number of students** / Number of classes.
3.	Percentage of qualified teachers	To measure the quality of education	**Number of qualified teachers** / Total number of teachers
4.	Survival rate	To evaluate educational efficiency	**Number of a cohort of students that achieve Grade 12** / Number of a cohort of students enrolled in Grade 1
5.	Repetition rate	To measure the efficiency of the educational system	**Number of repeating students** / Total number of students
6.	Percentage of educational expenditure in relation to GNP	To measure the efficiency of management system	**Educational expenditure** / GNP
7.	Proportion of "Specialized education" teachers in the teaching staff	To evaluate the weight of "specialist" Teachers in the teaching staff	**Number of specialist teacher** / Number of total teaching staff
8.	Proportion of expenditure on "specialized" education in the total expenditure	To measure the support of education policy on "specialized education"	**Expenditure on specialized education** / Total expenditure on education
9.	Expenditure on education	To measure the importance of policy	**Education expenditure** / Total expenditure
10	Per capita cost	To measure the cost of education	**Total expenditure** / Number of Students

Source: Dare, A. (2005) *Indicators of Quality*, a paper presented at the National Consultative Workshop on Implementing Quality in Low Income Countries, Accra.

Associated with these indicators are such critical issues as the following:

5.4 Student Achievement

One indicator of schooling quality is students' scores on internationally, standardised or nationally comparable tests of achievement in knowledge, skills, behaviour, and attitudes. The effects of non-school inputs, such as parental background, would have to be taken into account. Tests of cognitive

achievement are good predictors of students' future earnings (Bishop, 1992; Boissiere, Knight, & Sabot, 1985). Evidence also shows that test scores are highly correlated with economic performance in aggregated data. Hanushek & Kimko (2000) found that test scores are positively related to growth rates of real per capita GDP in cross-country studies. This indicates that the quality of education, in addition to the quantity, is an important ingredient of human capital formation.

5.5 School Resources

Resources available to the students in schools can influence the students' achievement. Various indicators such as pupil-teacher ratios, expenditure per pupil, teacher salary and educational level, availability of teaching materials can measure these resources. Although certain teaching strategies can be effective even for very large classes, students are often unruly in these settings. Moreover, teachers in large classes tend to focus more on rote learning, rather than on problem solving skills (Psacharopoulos & Woodhall, 1985). Another resource of a school necessary for achieving quality is the intensity of operation. The length of the term indicates how intensively schools are operated but can also be a signal of how importantly school education is perceived in a society.

5.6 Pupil-Teacher Ratios

Actual class size may be larger than measured pupil-teacher ratios because of teacher absenteeism and specialization. On the other hand, class sizes would be lower than observed pupil-teacher ratios in multiple-shift systems (where students attend school on double or triple shift rather than at the same time). Some researchers argue that measured pupil-teacher ratios are reasonable approximations of actual class sizes, especially, at primary schools (Lockheed et. al., 1991). Education quality is much higher when the pupil-teacher ratio is much lower and this improves students' achievement.

5.7 School Enrolment

One initial issue is the age at which children are enrolled for the first time. While primary education is officially meant to start at age 5 or 6 in most countries, late enrolment is common in Ghana, for a variety of reasons, e.g. children's participation in family economic activities and the difficulty of walking to distant schools.

5.8 Retention, Repetition and Dropout Rates in School

Once children are enrolled, it is crucial to ensure that they remain at school long enough to complete the curriculum and acquire basic skills. For a variety of school or family-related reasons, large numbers of children drop out of school, or more accurately, are pushed out (e.g. by the costs of schooling or by a child-unfriendly environment in the classroom) or drawn out to participate in household economic activities before completing school. In Ghana, the government has currently introduced a policy of free feeding of pupils and banned all fees at the basic schools in order that money does not become an inhibitive factor for pupils' access to quality education (National Consultative Workshop group report, November, 2005).

Level of pupils repeating a class also determines the quality of the education system. High repetition rate will indicate a lower quality of schooling or a lower level of ability amongst students. Repetition rate is measured as the percentage of repeaters in the total number of students enrolled at a given level. The rate of repetition would, however, also be influenced by variations in the promotion standards of schools. Repetition rates at the primary level are much higher in developing countries. Similar repetition rates are experienced at the secondary level.

5.9 Teacher Quality

How teachers are prepared for teaching is a critical indicator of education quality. Teacher quality depends not only on observable and stable indicators but also on the quality of training they receive. It also depends on the behaviour and the nature of the relationship teachers maintain with their pupils or students. The potential indicators deal with such aspects as:

- academic qualification
- pedagogical training
- years of service/experience
- ability or aptitude
- content knowledge

Preparing teachers for the challenges of a teaching career means equipping them with subject-specific expertise, effective teaching practices, an understanding of technology, and the ability to work collaboratively with other teachers, members of the community and parents. Available data suggest that large proportions of primary school teachers in developing countries particularly in sub-Saharan Africa lack adequate academic qualifications, training and content knowledge. Preparing teachers begins with the selection of those who are to enter teacher training (UNESCO 2004). Countries have set standards that define the entry qualification of individual to be trained as teachers. In many developing countries these standards are relatively low due to the difficulty in attracting persons with higher qualifications to train as teachers. Yet research shows that students tend to learn more from teachers with strong rather than weak academic skills (Ballou, 1996; Ehrenberg & Brewer, 1994), For instance, countries like Lesotho, Malawi and Tanzania have large proportions of their primary classes taught by teachers who only hold a lower secondary qualification or less (UIS 2001), In Ghana, although the entry qualification for teacher training is six subjects in the Senior Secondary School Certificate Examination (SSSCE), a study has revealed that an average of 65% of candidates admitted had very poor entry qualifications of aggregates between 21 and 24. Thus only 35% entered with relatively better aggregates of 6-20 (Ankomah, 2005).

5.10 Teacher's Knowledge Of Subject

The level of teachers' knowledge of subject is crucial and has been shown to be a good predictor of student achievement (Darling-Hammond, 2000). In many developing countries, levels of subject knowledge are a problem. In Ghana, as an example, lack of professional mastery of vernacular by teachers has been a major cause of the poor teaching of children's first language (L1) in schools.

> Very few teachers are sufficiently trained in the Ghanaian languages to be able to teach them. … Because most teachers do not understand the predominant language (L1) of the locality where they are posted to teach, they are compelled to use English as a medium and subject of instruction at all levels (Mrs Agyeman-Duah, Director, Curriculum Research and Development Division, GES)

5.11 Teacher Absenteeism

Teacher absenteeism, a persistent problem in many countries, reduces the quality of education and results in a waste of resources. In 2003, a World Bank study revealed that in Uganda and Zambia, the shares of teachers who had been absent in the previous week before the visit of researchers were 26% and 17%, respectively (World Bank, 2004, cited in Global Monitoring Report 2005). In Ghana, teacher absenteeism, especially in rural schools, has been a recurring concern for educational authorities.

High levels of teacher absenteeism generally indicate severe dysfunctions in the school system, but they have many different direct causes. Lack of professional standards and lack of support and control by education authorities and cultural demands are major issues in Ghana. In a study of rural schools in one district of Ghana, as an example, it was observed that most teachers absented themselves from school on Fridays to attend funerals (Oduro & MacBeath, 2003). Absenteeism is not peculiar to Ghana. Moses (2000) observed that teachers absent themselves when they have to travel to obtain their monthly pay, while Michaelowa (2002) attributed absenteeism to a situation where conditions compel teachers to take on a second job to supplement insufficient salaries.

A major problem with which most African Ministers of Education grapple in recent times is teacher shortage. At the 2000 *World Education Forum* held in Dakar, as an example, attracting and retaining qualified teachers in the teaching profession emerged as a major threat to achieving the *Millenium Development Goal* of providing *Education for all* (EFA) by 2015 (Nilsson, 2003). In Ghana only about 8000 newly trained teachers are turned out from 38 teacher training colleges annually, yet the Ghana Education Service (GES) encounters problems in staffing primary schools due to teacher attrition arising from various causes that continue to compound the already existing shortage situation (MOES,2005). One rural headteacher described the shortage problem as follows:

> 'At present we're only three teachers in the school so we combine the classes […] It's not easy at all […] It is difficult preparing lesson notes for combined classes […] It affects the way I teach the children. I know it doesn't help the weak ones but it's not my fault […] I'll be blamed if I don't meet targets' (Primary teacher, in Oduro & MacBeath, 2003).

In the rural-based schools the problem has gender dimensions, in that women are acutely under-represented in school headship. The male headteachers expressed grave concern about the gender imbalance of teaching staff, attributing this to women's unwillingness to take up teaching posts in deprived areas. This, they lamented, 'has wider effects on girls' attitudes to learning'. Some girls felt that it wasn't worth studying hard or even coming to school because the female role models they encountered in the villages were either farmers, seamstresses or fishmongers and housewives who 'give plenty birth' (Oduro & MacBeath, 2003, p. 445).

5.12 HIV/AIDS

The prevalence of HIV/AIDS in a growing number of developing countries, especially in sub-Saharan Africa, is a major factor influencing teacher quality, sometimes leading to high teaching-staff attrition rates. Deaths largely from HIV/AIDS contribute to teacher shortage. In Zambia, as an example, it is reported that 'the number of primary school teachers that died in 2000, is equivalent to 45% of all teachers that were educated during that year' (Nilsson, 2003:16), while about 30% of teachers in Malawi are reported infected (World Bank, 2002). In Ghana, there is no statistics on the effects of the disease on teachers; yet it is reported that about 3.5% of the entire adult population is HIV infected. In 2000, about 330,000 adults and 20,000 children were infected (National Aids/STI Control Programme, Ministry of Health, 2001). As summarised by the EFA Global Monitoring Report (2002): "In a situation where the shortage of qualified and experienced teachers is a major obstacle to succeed and reach the EFA goals, HIV/AIDS have serious effects on the situation in schools".

5.13 Educational Facilities

This is about school space and equipment. In countries that have reached high levels of education, this represents marginal investment. However, in countries that have significantly low enrolment ratios, this is one of the most important budgetary categories. Lack of facilities has been a major problem related to achieving quality in Ghana. This is reflected in Gyekye's (2002) comments on constraints that militate against improving the output and quality of postgraduate students' performance below:

> Equipment in several of the labs of science departments is mostly obsolete. Chemicals and other inputs needed for scientific experiments are insufficient. In such circumstances, it will be difficult to … improve the quality of postgraduate output (p.25).

6. STUDIES IN GHANA RELATING TO EDUCATION QUALITY

Findings from a number of studies on quality-related issues in education between 1987 and 2005 suggest that quality of education is generally poor, especially in the deprived rural areas. Examples of such studies are listed below:

6.1 UNESCO's Sponsored Project on Review of Ghana's Education Sector Analysis (1987 –1998)

Between 1987 and 1998, UNESCO's Group on Education Sector Analysis evaluated various aspects of educational quality under the following four main themes:

Study Theme	Focus
Improving management efficiency and management	Management efficiency, decentralization and sustainability, funding of education; partnership between Educational Ministry and development partners; staff development and reform implementation.
Improved access and equity	Access, participation and equity; Access to and efficiency of tertiary education; Girls' education; community participation.
Improved quality education	Educational quality; curriculum improvement; teacher education and efficiency; educational assessment
Others	Relevance of education to national needs; NGO participation; Education and health; Tertiary education; Functional literacy programme; Distance education.

Source: Agyeman, et al. (2000), ADEA Working Group on Education Sector Analysis, p. 23

The analysis found the quality of education to be 'generally low, lower in rural schools than in urban ones, and lower in public than in private schools' (p.25). Absence of efficient and effective leadership and management, inadequate qualified teachers, lack of management information systems, teaching and professional competence, irrelevant school curriculum and poor enrolment of girls were some identified hindrances to achieving quality education.

6.2 USAID Commissioned Study into School Performance (2003)

A comparative study carried out by the Educational Assessment and Research Centre (EARC 2003), on behalf of USAID, into the academic performance of public and private school pupils in Southern Ghana found pupil performance in private schools higher than public schools. The difference was attributed to the quality of supervision of instruction in private schools. This finding confirms

Opare's (1999) observation that 'monitoring and supervision of teacher's work was more regular in private schools than in public junior secondary schools in Accra and Sekondi-Takoradi. A recent study by Owusu-Ansah (2005) on time management in schools also found that 'while both private and public schools misused instructional time, the private schools better managed instructional time than the public schools'.

6.3 Department for International Development (DfID) Funded Project on Linking School and the World of Work

Indigenous education in Ghana, and for that matter Africa, was considered 'practical, relevant and work oriented, aimed at making everyone productive' and establishing a link between social life and culture of the people. Quality education, in the indigenous Ghanaian sense therefore is that which prepare recipients for the world of work. To what extent does the school system create an awareness of, and prepare students to enter the world of work? Finding answers to this question was the main thrust of a 2005 DfID-funded project carried out by a team of researchers from the University of Education, Winneba. The major finding in the study was that the link between school and the world of work is weak. As an example, 62% of teacher trainers in the study 'thought that schools were not preparing pupils for employment arguing that the curriculum was too academic, whereas 65% and 38% administrators and employers maintained that teachers fostered negative attitudes to the world of work' (p.113). For quality education to be achieved, young people and children must be given the tools to deal with the different tasks they will need to perform in their adulthood. Education must help the recipients to develop themselves as persons. They must learn the necessary skills and achieve the essential knowledge that will make it possible for them to play an active part in economic life. As citizens they must learn to be critical and responsible. In today's world there is also a need to prepare young people and children to participate in and understand activities at the international level**.**

6.4 Netherlands Universities Fund for International Collaboration (NUFFIC) Funded Project on Leadership and Management and Related Studies

An exploratory study of polytechnics in Ghana in 2004 by a consortium of Dutch researchers identified ineffective leadership and inefficient management as a major factor militating against quality delivery of polytechnic education in Ghana. Similarly, in a study on the professional development of primary headteachers, Oduro and MacBeath (2003) reported that heads of rural schools lack competences in health administration, instructional supervision, record keeping, financial administration and other fundamental qualities. Prior to these studies, Atakpa and Ankomah (1998) reported on a baseline study carried out by the Institute for Educational Planning and Administration (IEPA) on the state of school management throughout Ghana, which purposed to examine methodology for promoting quality teaching and learning in the schools. From the study various factors relating to school management effectiveness were found lacking in some schools. These include, among others, instructional leadership skills of the school head, time management, school vision and mission, tradition of performance, learning environment, and school and community relations.

7. EXAMPLES OF SUCCESSFUL QUALITY IMPROVEMENT INITIATIVES IN GHANA

There have been a number of initiatives in Ghana aimed at ensuring quality in the country's educational provision:

7.1 The Quality Improvement in Primary Schools (QUIPS) Programme

The USAID QUIPS programme, which was initiated in 1997, works in collaboration with MOE, GES, District officials and community representatives, to increase the effectiveness of the primary education system. The programme supports interventions at three levels, that is, school, community, and district. At the school level, training is provided to teachers, School Heads, Circuit Supervisors and other district officials. At the community level, awareness and mobilization are supported for strengthening school management committees (SMCs) and PTAs. Improving the management capacity at the district level includes planning, budgeting and financial administration.

This last intervention also provides grants for the District Education office.

Each year approximately 75 new schools and communities are selected to participate in the USAID QUIPS programme. Each group receives two years of interventions similar to those described above. In 2005, 88 partnership schools were selected from 22 districts. To date, QUIPS has provided interventions in over 400 partnership schools and communities in all regions and 96 districts, reaching a total of about 112,000 primary students. A mid-term assessment of the QUIPS programme indicates that the programme is impacting positively on teaching and learning outcomes in primary schools throughout the country.

7.2 Performance Monitoring Test (PMT) and School Performance Appraisal Meetings (SPAM)

The PMT and SPAM, which were introduced in 1998, have proved to be effective tools in monitoring teaching and learning outcomes in basic schools. The PMT is a test in English and Mathematics administered to 25% - 50% of pupils in public schools. The results are discussed at School Performance Appraisal Meetings (SPAM) where parents have the opportunity to analyze the performance of their children and map out strategies for improving their performance and school achieving set targets. Records suggest that the initiative has impacted positively on quality teaching and learning in schools.

7.3 District Teacher Support Teams (DTST)

The District Teacher Support Team provides an anchor for improving the quality of teaching and learning at the district level. It provides support to schools in the area of good practices in literacy, numeracy, leadership and problem solving.

7.4 The Whole School Development Programme (WSD)

The WSD is one of the strategies employed by the Ghana Education Service for mainstreaming all interventions for the achievement of Free and Compulsory Universal Basic Education (FCUBE) objectives. Its focus is to provide support for developing competent teachers, motivated teachers, motivated children, informed and concerned community, effective utilization of school resources, and professional leadership of headteachers. The implementation of this programme over the years has helped to expand access, improve quality teaching and learning, improve the supply of logistics and curricula development, and leadership in participating schools.

7.5 Supply of Teaching and Learning Materials

The supply of teaching and learning materials is also receiving the necessary attention. Under the Book Scheme for Basic Schools, 5 million supplementary readers and 440,000 atlases were supplied to public Junior Secondary Schools in 2005 as a result of which a total of 1,316,216 supplementary readers have been supplied to Junior Secondary Schools. Private Basic Schools and Senior Secondary Schools also have access to government procured and printed textbooks.

7.6 Decentralization and Community Participation

Management of schools has been decentralized with much opportunity given to communities and district assemblies to participate in managing schools. District Assemblies in Ghana have the responsibility to build, equip and maintain schools under their areas of jurisdiction. One hundred and ten District Assemblies have established District Education funds for this purpose.

7.7 Technical Education

Technical and vocational education has been given a boost with the ongoing establishment of 20 Technical/Vocational Resource Centres throughout the country (2 in each region). At the moment Ghana can boast of 23 public technical institutes and several private ones including Vocational Institutions. The private sector is contributing a lot in providing quality education at the secondary level. The private second cycle schools had a total enrolment of 90,000 in 2005. Beneficiaries of the technical and vocational education in the country have been equipped with technical and professional skills needed for self-employment.

7.8 Teacher Training Education

Quality teacher education is crucial for effective education outcomes. To this end, facilities in all the 38 public Teacher Training Colleges have been rehabilitated under the German Agency for Technical Co-operation (GTZ) and Japan International Cooperation Agency (JICA) assistance programme. Under a new programme known as In-In-Out, teacher trainees have been offered the opportunity of gaining long practical internship experience in schools. It is a school-based training scheme in which trainees are expected to spend two years at the college and use the third year for practice teaching in the classroom. All the 38 public Teacher Training Colleges have been upgraded into diploma awarding institutions to ensure quality teaching and learning in schools. Total

enrolment in the colleges increased from 18,955 in 1994 to 21, 410 in 2001 (Teacher Education Division, GES).

7.9 District Sponsorship Scheme in Teacher Training

The Scheme aims at ensuring that districts meet their full supply of trained teachers in their schools. Teachers benefiting from this sponsorship are to be posted to schools in the district after completion, particularly, to the schools in the rural/deprived areas that usually experience teacher shortages. Districts are allowed to sponsor candidates for training. On completion of their training, it is incumbent upon such beneficiaries to teach in the districts that sponsor them for at least three years. Most rural areas have benefited greatly from the scheme; thus improving the status of teacher supply to rural schools.

7.10 Girl–Child Education Promotion Initiative

The Ministry of Education has established a Girl Education Unit in the GES to help increase the enrolment of girls in schools. The unit was tasked to reduce the dropout rate of girls from 30% to 20% in the primary schools and in the Junior Secondary Schools (JSS) from 27% to 15%. Considerable progress has been made in this area. For example while in 1990/91 girls' enrolment at the primary level was 45%, in 2000/2001 it was 47.2%. That of the JSS went up 45.3% in 2000/2001 from 40.8% in 1990/91.

Science, technology and mathematics education (STME) clinics for girls have been instituted to promote the interest of girls, in science, technology and mathematics education and also enable them interact with women scientists and technologists. The clinics have been decentralized to the district level and this has resulted in an increase in the number of girls pursuing science and technology rated course in the secondary schools as well as the Universities. In addition, the Girl Child Scholarship programme that began in 2001 by the Ghana Education Service continues to enjoy support from the Ghana Education Trust Fund (GETFund).

7.11 Tertiary Education

At the moment there are 10 Polytechnics in Ghana (one in each region) and 6 public and 10 accredited private universities. The National Accreditation Board has accredited 9 Tutorial professional colleges (which prepare students to take examination of accredited (recognized) bodies within and outside Ghana, and 2 distance education-learning centres that represent accredited universities outside Ghana. Enrolment in all tertiary institutions has improved considerably. For example enrolment in Polytechnics increased from 1, 299 in 1994 to 18,474 in 2000/2001.

Capacity building in teaching, research, leadership, information technology and others has become a policy priority for the Ghana government. To this end, polytechnics for example are being encouraged to introduce post-HND (Higher National Diploma) and Bachelor of Technology programmes to produce requisite manpower for industries. Physical infrastructure in the area of office, residential and classroom accommodation, libraries, laboratory facilities as well as tools and equipment supply in all tertiary institutions have shown considerable improvement through GETFund support.

All universities in the country have also established quality assurance units through which performance at the institutional, faculty and departmental levels are evaluated. These are to ensure

quality and relevance in all aspects of university life, teaching, research, and institutional mission, vision and focus of lecturers in teaching and research are evaluated.

7.12 National Accreditation

At the system level, there is a National Accreditation Board that ensures quality content and delivery of programmes in tertiary institutions. The accreditation process involves a thorough peer review for new universities and programmes.

7.13 Functional Literacy Programme

The Non-formal Education Division of the Ministry of Education was established in 1991 tasked to carry out the eradication of illiteracy in Ghana by the year 2011. Statistics available indicate that through the functional literacy programme, national illiteracy rate has currently been reduced from 69% to 52%.

7.14 Distance Education

Distance education has been found to be an important option to meet the demand for higher education in Ghana. The introduction of distance learning has reduced the cost of higher education for both the government and students. It has provided increased access to tertiary education.

7.15 Non–Governmental Organisations (NGOs)

NGOs provide major services to education such as school renovation and construction including teachers' quarters, provision of educational materials, in-service training and up-grading of teachers' skills, capacity building of Parent Teacher Associations, functional literacy classes with non-formal education division, provision of school uniforms, and the teaching of science, mathematics and English in senior secondary schools. All these have contributed to the improvement of educational quality in Ghana.

8. CHALLENGES OF MAINSTREAMING INITIATIVES TO IMPROVE QUALITY EDUCATION

Notwithstanding the many advantages to be derived from mainstreaming the various initiatives towards the improvement of the quality of education in the country, there are several challenging situations that militate against their effective implementation. Major challenges identified at the National Consultative Workshop and through individual discussions are listed below:

- Lack of political will to incorporate research findings into policy initiatives and enforce the implementation of such initiatives. As an example, it was mentioned that research is replete with evidence to confirm the socio-cultural advantage of identifying and developing one indigenous national language for the country. Yet, the political will to initiate policy discussions on instituting a national local language for the country has been problematic. This has affected pupils' learning of L1 in schools.

- Financial constraints: this has been a major hindrance to mainstreaming change initiatives in the educational sector.

- Absence of reliable and consistent database for targeted planning.

- Difficulty in getting reliable data to inform quality decision making. Related to this is the absence of consistent methods for calculating resource requirement projections and their enhancement to be commensurate with emerging needs and technologies of knowledge-based societies.

- Ineffective leadership and supervision of change initiative implementation in schools.

- Threat from diseases. Death and physical defects emanating from malaria, HIV/AIDS and other diseases tend to affect the human capacity for supporting the implementation of mainstreamed initiatives.
- Uneven distribution of human and material resources across the urban and rural communities. In rural AND disadvantaged societies, facilities to support change initiatives are either non-available or are inadequate to support the mainstreaming of quality education interventions in the country.

- Lack of systematic and regular evidence of learning outcomes shown in terms of standard, competency attainment and what students really learn.

- Limited use of information technology facilities to aid communication.

- How to measure and reflect private sector and community financial contributions towards EFA goals as reflected in strategies of public-private partnership; Engaging more strongly with local level governance and financing for quality outcomes.

9. RESEARCH STUDIES IN SOME AFRICAN COUNTRIES RELATING TO EDUCATION QUALITY

A number of studies have been conducted in parts of Africa in relation to educational quality in various contexts**.** Such studies in two African countries, namely Ethiopia and Zimbabwe, are highlighted below.

9.1 Ethiopia

(Studies of Education in Ethiopia: An Inventory and Overview of Education Sector Studies in Ethiopia 1994 – 1997, UNESCO Working Group on Education Sector Analysis, 1999).

In Ethiopia studies relating to education quality include basic education for school-age children, female education, technical and vocational education and training, efficiency, equity and access, and decentralization. A study on students' participation, dropout and achievement in primary schools and manpower in the Wereda zone reported in January 1977 found that the lifting of school fees and campaigns carried out to persuade parents had improved participation and enrolment in the zone. Compared to boys, the participation of girls was lower. There were variations in the rate of the school-going population among regions. There had been a slight decline in female participation at primary and junior secondary levels with an increase at senior secondary level. The largest schools are in the urban areas. The pupil/teacher ratio was slightly below 50.1. Growth in enrolment was affected by a shortage of teachers, textbooks and lack of space in existing schools.

Dropout was a serious problem and was caused by a preference for trading to attending school. Difficult rural life, involvement in agricultural activities for boys, and early marriage and fear of abduction of girls, were additional reasons. The quality of education was affected by an inadequate supply of curricular materials and a shortage of classrooms, desks, teachers, etc. There was no significant gender disparity in terms of grade repetition but still boys performed better than girls. Wereda education office staff lacked proper training and suffered from a high turnover.

9.2 Zimbabwe

(Review of Education Sector Analysis in Zimbabwe 1990 - 1996, UNESCO Working Group on Education Sector Analysis, 1999).

A number of similar studies have been conducted relating to educational quality in zimbabwe. Specific issues relating to quantity and quality such as school facilities, enrolment trends over a period, teacher supply, incremental resource requirements, infrastructure, logistics, internal and external efficiency, cost-effectiveness, learning outcomes, relevance and equity issues were addressed in the studies**.** From a study titled "Indicators of the Quality of Education: A National Study of Primary Schools in Zimbabwe", the following findings were made. Mean reading abilities of Grade 6 boys and girls were not statistically different. Teachers considered classroom supplies as the single most important factor to improve their job satisfaction. Personnel in the Ministry of Education needed training in data management and data analysis skills to facilitate their operations.

Another study on "Education in Zimbabwe: Issues of quantity and quality" described contextual and historical statistical information focusing on school facilities, enrolments, teacher supply, incremental resource requirements, infrastructure, logistics, internal and external efficiency, cost-effectiveness, relevance and equity issues. Principal findings made were that Zimbabwean women

continue to be under-represented in the modern sector, in high-level jobs and in higher education despite improvements due to such legislations as the Equal Pay Regulation of 1982, the Industrial Conciliation Act and the Labour Relations Act of 1984. In education, the general pattern found was that girls were competing favourably with boys in the lower levels of the system, but were outnumbered at the higher levels. Those girls who survived through the system were generally lower achievers than boys.

An evaluation of the effects of the country's disadvantaged schools rehabilitation project came out with a number of findings. For example, it was found that the rehabilitation project provided essential physical facilities in rural marginalized schools by refurbishing existing facilities and supplying furniture. The various rural communities responded enthusiastically in support of all projects intended for the improvement of the quality of teaching and learning physical environments in their schools. However, the project implementation was constrained by inadequate to poor record keeping and financial accounting, escalating costs of building materials and inadequate supervision of the projects.

Similarly, a study undertaken to examine the factors affecting the education of women and girls in commercial farming areas of Zimbabwe found that access to primary education in commercial farming areas was limited. The impediments preventing increased participation by girls and women in formal education were found to be socio-cultural and socio-economic. Participation rates of girls in primary schools in the commercial farming areas varied from 48.9 % at Grade 1 level to 41.2 % at Grade 7 level. The quality of education and quality of student achievement were found to be low.

10. USEFUL SOURCES

Higher Education Innovations in sub-Saharan Africa

Association for the Development of Education in Africa (ADEA), Association of African Universities, Accra (2004).
ADEA's Working Group on Higher Education (WGHE) has a collection of successful innovations and quality assurance practices of universities in Africa. The collections include regional reports on innovations in Francophone Africa, Eastern Africa, Southern Africa and Ghana.

Review of Education Sector Analysis in Ghana, 1987-1998
Prepared by D. K. Agyemang, J. J. K. Baku, Gbadamosi, assisted by E. Addabor, K. Addo-Adeku, M. Cudjoe, A. A. Essuman, E. E. K. Gala and C. Pomary, UNESCO (2000).
UNESCO's Working Group on Education Sector Analysis has evaluated the successes of 34 international and national sponsored research projects and interventions related to various aspects of quality education in Ghana. Their work provides a framework for governments and their international partners to compare the similarities and differences between related quality education initiatives carried out in various national contexts.

Bridging the Gap: Linking School and the World of Work
Prepared for the Department for International Development by P. J. Towers, J. Anamuah-Mensah, P. S. D. Mushi and D. W. Kent (2005).

This report provides profiles of pupils, teachers and parents involved in the delivery of relevant education *in Ghana* and *Tanzania.* It provides updated evidence about stakeholders' perception of the quality of curriculum content in Ghanaian schools as well as the effectiveness of methodologies used by teachers.

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