



Association for the Development of Education in Africa

**ADEA Biennial Meeting 2003
(Grand Baie, Mauritius, December 3-6, 2003)**

Working Group on Higher Education

**The Role and Contribution of Higher Education
to Improving the Quality of Basic Education**

**A Case Study of the Centre for Research on Improving Quality
of Primary Education in Ghana (CRIQPEG)**

*by Emmanuel Adow Obeng
James Adu Opare
Joseph M. Dzinyela*

**Working Document
DRAFT**

PLEASE DO NOT DISSEMINATE

Doc 7.C

This document was commissioned by ADEA for its Biennial Meeting (Mauritius, December 3-6, 2003). The views and opinions expressed in this volume are those of the authors and should not be attributed to ADEA, to its members or affiliated organizations or to any individual acting on behalf of ADEA.

The document is a working document still in the stages of production. It has been prepared to serve as a basis for discussions at the ADEA Biennial Meeting and should not be disseminated for other purposes at this stage.

© Association for the Development of Education in Africa (ADEA) – 2003

Association for the Development of Education in Africa (ADEA)

International Institute for Educational Planning

7-9 rue Eugène Delacroix

75116 Paris, France

Tel.: +33(0)1 45 03 77 57

Fax: +33(0)1 45 03 39 65

adea@iiep.unesco.org

Web site: www.ADEAnet.org

Contents

ABSTRACT	5
1. INTRODUCTION	6
2. FACULTY OF EDUCATION, UNIVERSITY OF CAPE COAST	7
3. ESTABLISHMENT OF CRIQPEG WITHIN THE FACULTY OF EDUCATION	10
3.1. OBJECTIVE(S) OF THE CENTRE	10
3.2. RESEARCH ACTIVITIES OF THE CENTRE	10
3.3. THE IMPROVING EDUCATIONAL QUALITY (IEQ) 1 PROJECT	11
3.3.1. <i>Phase I of IEQ 1 Study</i>	12
3.3.2. <i>Phase II of the IEQ 1 study: English language proficiency and instruction</i>	13
3.3.3. <i>Phase III of IEQ 1</i>	14
3.3.4. <i>Overall findings</i>	14
3.3.5. <i>Conclusion from the IEQ 1 project</i>	18
4. CONCLUSION.....	23
4.1. LESSONS LEARNT	23
4.2. IMPACT OF CRIQPEG	23
4.3. THE WAY FORWARD	24
4.4. SPECIFIC RECOMMENDATIONS	24
4.5. GENERAL RECOMMENDATIONS.....	25
5. BIBLIOGRAPHY.....	26

Acronyms and abbreviations

ADEA	Association for Development of Education in Africa
AED	Academy for Educational Development
AIR	American Institute for Research
CRIQPEG	Centre for Research on Improving Quality of Primary Education in Ghana
CRT	Criterion-Referenced Test
EFA	Education for All
HEIs	Higher Educational Institutions
IIR	Institute for International Research
MOE	Ministry of Education
QUIPS	Quality Improvement in Primary Schools.
UCC	University of Cape Coast
USAID	United States Agency for International Development
WGHE	Working Group of Higher Education

Tables

Table 1	Pupils' skill profiles by grade level at baseline and follow-up 1 ½ years later	15
Table 2	Pupils' profiles for urban and rural children	16

ABSTRACT

A case of the Centre for Research on Improving Quality of Primary Education in Ghana (CRIQPEG) which is a research unit established within the Faculty of Education of the University of Cape coast to carry out school/classroom-based research for the purpose of improving the quality of education at the primary school level and to demonstrate the process by which research findings could be integrated into the education system.

After a brief overview of the activities of the Faculty of Education in training teachers and improving the quality of education in Primary schools, the paper describes in detail the research activities of CRIQPEG in respect of the following projects:

- Improving Educational Quality Project which examined the availability, sources and use of instructional materials in the teaching and learning of Science, Mathematics and English Language as well as the acquisition of English Language by primary school pupils.
- Baseline and Achievement Gains Studies for Quality Improvement in Primary Schools.
- Study on the implementation of Ghana School Language Policy at the primary school level.

Research findings and lessons learnt from the projects are and the interventions identified and implemented are carefully documented in the paper.

The paper assessed the impact of CRIQPEG's research activities as positive since the research findings have influenced the Government of Ghana's policy on basic education and have contributed to a change of attitudes of teachers and pupils in classroom practice and in some cases change of attitude of communities towards school management.

The paper concludes that the way forward for CRIQPEG is to build capacity to conduct further research and in a more sustainable way. Specific recommendations for supporting capacity building of the CRIQPEG are made as well as general recommendations for educational policy makers, Higher Education institutions, ADEA and development partners supporting education in Africa, including how to enhance the role and contribution of Higher Education to improve the quality of education at the basic level.

1. INTRODUCTION

1. In providing basic education according to the “Education for All” (EFA) framework for action (Jomtien 1990, Dakar 2000) quality must not be compromised. It is essential that conscious effort is made to ensure quality in order to achieve the broad goals of EFA. Quality basic education will ensure effective learning outcomes and enable beneficiaries to better their own living standards as well as contribute more substantially to the socio-economic progress of their countries.

2. In this effort to assure quality of basic education, Higher Educational Institutions (HEIs) have a significant role to play. Specialised HEIs such as Faculties of Education and their research units, no doubt, have a more direct role to play within their institutional mandate. Such activities may include manpower development training of various categories of teachers and instructor research on specific issues concerning quality education and carrying out much needed field interventions. However, HEIs in general can assume roles that enable them to contribute more significantly and effectively towards assuring quality and relevance in the provision of basic education within the EFA framework. These roles sometimes may lie outside their institutional objectives, and can best be played through a variety of activities and partnerships specifically directed to the needs of basic education and to improving quality. Such activities may include:

- providing distance education programs to support teaching and training at the basic education level
- harnessing, packaging and disseminating new knowledge and skills to help achieve EFA goals;
- organizing training workshops on relevant topics for pupils in-house or extramural;
- conducting clinics in relevant disciplinary areas such as science and technology, ICT and mathematics for pupils.
- undertaking familiarisation visits to basic education training institutions in the formal and informal sectors to create awareness for and awaken interest in learning in relevant disciplinary areas;
- organizing open days in their institutions to awaken the interest of pupils and the wider public in learning possibilities.

3. This list is not exhaustive but only indicative of what HEIs can contribute to improving quality and relevance of basic education in line with their natural abilities to innovate to suit special circumstances, needs and demands.

2. FACULTY OF EDUCATION, UNIVERSITY OF CAPE COAST

4. A necessary condition for a sustained quality basic education is constant research that informs basic educational practice. Another necessary condition is the institution of interventions that address deficiencies unearthed through research. Against this background the Faculty of Education, University of Cape Coast, besides its main mandate, also conducts research in the quality of basic education. The Faculty also offers interventions in areas where deficiencies are found.

5. The prime mandate of the Faculty of Education of the University of Cape Coast is to produce high quality teachers to serve in the second cycle schools. Some of the graduates thus serve as teacher trainers in the training colleges. Through their annual Subject Association Meetings, the teachers in the training colleges organise workshops on pedagogical skills and curriculum development. All these are geared toward quality improvement. In all these professional development workshops, members of the Faculty of Education serve as workshop coordinators and resource persons.

6. All basic education teachers are trained in pre-university educational institutions. Their selection for training, their curriculum, their examination, and their certification are all the responsibility of the Institute of Education of the Faculty of Education, University of Cape Coast. The Institute of Education does this in close collaboration with the Teacher Education Division of the Ghana Education Service and the Ministry of Education. This collaboration and close monitoring by the Institute of Education is designed to ensure that teachers churned out of the teacher training colleges are competent enough to be active participants in the quality improvement drive.

7. From time to time the Institute of Education, in collaboration with the Teacher Education Division of the Ghana Education Service, reviews the curriculum and mode of practical training, so as to meet the demands of the quality objective. Through this process it was observed that the pre-service training of teachers was not robust enough. Specifically it was observed that the duration of students' pre-service exposure to practical teaching practice was not long enough. It was also observed that students were not strong enough in subject matter content. Consequently, in the 2001/2002 academic year, a system known as the IN-IN-OUT program was introduced as a feature of the teacher education program. In the first year the students stay on campus to study academic subjects (IN). This is designed to equip them with a sound grounding in subject matter, so that their competence and confidence in the classroom will be guaranteed.

8. In the second year, which is also an on-campus program (IN), the students are introduced to courses in education. This involves general principles and methods of teaching specific subjects, educational psychology and classroom management. Others are school organisation, school and society, and micro-teaching. Micro-teaching is designed to offer laboratory experience in teaching. As such it is a time when second year teacher trainees engage in peer teaching.

9. In the third year, the student spends a whole year in a school off-campus as an intern (OUT). The students teach under school/classroom-based mentors, lead mentors and link tutors. The mentors are classroom teachers who serve as the direct and closest guides and counsellors. Head teachers and other seasoned teachers serve as lead mentors. Periodically, link tutors or tutors from the training college visit the schools to offer close monitoring and counselling to the student interns. These monitoring and counselling sessions with the students are designed to ensure that they put into practice those pedagogical and teacher-pupil relations skills learned in their educational studies courses.

Feedback from the hosting communities suggests that the students' performance is exemplary. In spite of the good news, the Institute of Education is still doing research to find out the most convenient and most economical way of running the OUT component of the teacher-training program.

10. Still in the direction of quality, the University of Cape Coast in 1991 set up the Department of Primary Education. The setting up of the Department was designed to train competent teachers to teach in the teacher training colleges. It was also designed to produce head teachers and circuit supervisors who will offer professional support to classroom teachers. The Department of Primary Education does research in pedagogy, preparation of instructional materials, and in school management. They share their research findings with basic schools in the Cape Coast area, to start with. Later, the information is disseminated to other schools in the country. Graduates of the department are expected to run workshops on trends in basic education to basic school teachers, head teachers and circuit supervisors, all for the sake of quality improvement.

11. Besides the normal institution-based pre-service training of teachers, the Faculty of Education does other things in the quality improvement domain. For example, when the New Education Reforms of 1987 were launched in Ghana, some staff of the faculty were selected to run workshops in pedagogy and school management to classroom teachers and head teachers. They also played leading roles in sensitising communities to take ownership of their schools and give them the necessary support. Besides, over the past six years or so, two innovations in teacher education have been introduced to further the quality improvement drive. These innovative programs are the Evening Classes program leading to the Diploma in Basic Education and the Post-Diploma B.Ed. in Basic Education. Cape Coast and its environs serve as the catchment areas. The teachers attend classes in the University in the late afternoon, when their normal school work ends. The program aims at equipping the teachers with more content, more of general education studies, and new pedagogical approaches that have been discovered through research. The students are encouraged to put the innovative skills into practice in their classrooms. The program, which was initially designed for teachers in and around Cape Coast, now caters for teachers from other regions in Ghana. Such teachers are released to the Cape Coast Directorate of Education to teach full time.

12. Even though no scientific tracer studies have been conducted to find out how the graduates are doing in the field, informal feedback from some head teachers and circuit supervisors indicate that the training received by the teachers is making a positive impact. The teachers have improved in terms of lesson planning, pedagogical skills, use of teaching-learning materials, teacher-pupil relations as well as mastery of subject matter. As a result, records available at the Municipal Directorate of Education, Cape Coast, suggest that pupils' achievements are on the rise. The Institute of Education intends to evaluate the success and impact of the program through a more robust tracer study.

13. The other innovative program aimed at improving quality of basic education is a program of teacher education by Distance Education. The purpose of this program is the same as that of the Evening Classes program. The difference, however, is that the teacher-students stay in their schools and study their modules at home. They attend periodic study-centre meetings during which they receive tutorials with their peers under local area course tutors. Local area course tutors and resident tutors monitor their classroom practice. Occasionally, personnel from the Faculty of Education visit classrooms to lend professional support to the student teachers. University of Education, Winneba, also runs a Distance Education program for the same purpose as that of University of Cape Coast.

14. Besides the programs and activities discussed above, the Faculty of Education also has a centre that deals specifically with research into improving quality of primary education in Ghana. This centre, the powerhouse of quality basic education research, is the Centre for Research on Improving Quality of Primary Education in Ghana. (CRIQPEG).

3. ESTABLISHMENT OF CRIQPEG WITHIN THE FACULTY OF EDUCATION

15. The Association for the Development of Education in Africa (ADEA), in carrying out its mission of promoting the sharing of experiences and successful strategies in the provision of quality basic education, commissioned the Centre for Research on Improving Quality of Primary Education in Ghana (CRIQPEG) of the Faculty of Education, University of Cape Coast to undertake a case-study of Ghana's experience.

16. Meanwhile in 1990, the US Agency for International Development (USAID) through its commitment to assist developing countries with economic and social development through education launched the Improving Educational Quality (IEQ) Project.

17. IEQ began operations in 1991 with the award of a five-year contract to the Institute for International Research (IIR) [now the American Institute for Research (AIR)] in U.S.A. to work in three countries, two in sub-Saharan Africa and one in Central America. Following a global announcement to USAID Missions and Bureau, core team members visited several countries, including Ghana, to meet with local stakeholders, learn about national institutions and discuss entry points for the IEQ process.

18. Between 1991 and 1992, a member of the team visited Ghana and held a series of meetings with the Ministry of Education (MOE) and University of Cape Coast (U.C.C.), which led to the signing of a Contract Agreement. IEQ'S institutional partner in Ghana was the Faculty of Education at the University of Cape Coast. The partnership has resulted in the creation of the Centre for Research on Improving Quality of Primary Education in Ghana (CRIQPEG). The Centre draws on the expertise of lecturers from all departments in the Faculty and sometimes from other Universities in Ghana. All its studies focus on the primary school system, and the results are disseminated nationally and internationally.

3.1. Objective(s) of the centre

19. The main objective of the centre is to carry out school/classroom – based research for the purpose of improving quality of education at the primary school level in Ghana. It seeks to demonstrate a process whereby research on improving educational quality could be integrated into the educational system at the primary level.

20. The original stated goals for Ghana and other IEQ countries were to:

- Understand how and why the country's classroom-based interventions influence pupil performance.
- Use classroom research findings to improve educational quality.
- Create opportunities for dialogue among researchers and educators seeking to improve educational quality at the local, regional, national and international levels.
- Maintain a history of the project by documenting the rationales for choices made, opportunities and constraints encountered, and lessons learned.

3.2. Research activities of the centre

21. Since the establishment of CRIQPEG, the following major research activities have been undertaken:

- a) Improving Educational Quality Project I (IEQ 1)
 - b) Baseline and Achievement Gains Studies conducted for Quality Improvement in Primary Schools (QUIPS) Project.
 - c) Improving Educational Quality Project II (IEQ II): The implementation of Ghana's School language Policy.
22. Each of the above research activities are discussed below briefly.

3.3. The Improving Educational Quality (IEQ) 1 project

23. The government of Ghana, since 1987, is pursuing an educational reform program to restructure the educational system and to improve educational outputs and outcomes. Specifically the objectives of the reform are to increase access to basic education for all children of school age, improve on the quality of instruction and output, and improve school management. These objectives are all in line with the 1990 Jomtien Declaration on Education For All by the year 2000. To this end, a number of projects were launched.

- The IEQ I effort to improve educational quality in Ghana stems from a USAID/Ghana program entitled the Primary Education Program (PREP), which was launched in July 1991. PREP was to strengthen the policy and institutional framework required to ensure a quality, effective, equitable and financially sustainable primary education system in Ghana by the year 2000 [(Executive Summary, Ghana Primary Education Reform Program (PREP), September 10, 1992)], cited in Harris, and Dzinyela, (1997). Major activities of the PREP Program included distributing textbooks and guides to schools in Ghana for 1.8 million school children,
- Organising a comprehensive in-service training program for approximately 30,000 primary school teachers,
- Developing end-of-primary cycle criterion-referenced testing (CRT) for grade 6 pupils in English and Mathematics, and
- Preparing and implementing an Equity Improvement Plan, and
- Training of teachers in instructional content and processes for each of the subject areas.

24. There was a natural fit between the primary school initiative and the goals of IEQ.

25. Through partnership between Institute for International Research and CRIQPEG of the University of Cape Coast a research was designed to support and complement PREP innovations. During a four-year period, researchers followed a cycle of assessment-assimilation-action designed to assess factors affecting learning, share findings with stakeholders, collaborate with stakeholders on improvements, and re-assess the situation.

26. The IEQ 1 Project in Ghana embarked upon a number of research activities in selected primary schools in an attempt to improve quality of education at that level and thus help to achieve the goals of the education reform. The project consisted of three phases.: Phase I of IEQ 1 research examined the availability, sources and use of instructional materials in the teaching and learning of Science, Mathematics and English Language. Phase II of the research focused on English Language acquisition of primary school pupils because of its importance in the Ghanaian Society as the official language and medium of instruction in Ghanaian schools. In phase III CRIQPEG researchers

collected additional information to enhance the longitudinal data set and to answer questions posed by earlier findings.

3.3.1. Phase I of IEQ 1 Study.

27. CRIQPEG researchers began by going to the classrooms to investigate the instructional process firsthand. The research took place between February and March 1993 and focused on 18 classrooms (P1 – P6) in six primary schools in the Central Region of Ghana. It included 216 hours of classroom observation and a number of interviews with teachers, pupils, parents and community and school leaders. The overall purpose of the Phase 1 study was to gain a clearer understanding of the primary school environment, increase team members' exposure to primary schools, gain familiarity with qualitative methods, and generate findings that would guide future research.

28. The researchers gained valuable insight into the instructional process, teachers' use of instructional time, characteristics of the curriculum, teacher adherence to the timetable, and the availability and use of instructional materials.

Availability and use of instructional materials

29. To complement PREP activities, the focus was on availability, sources and uses of instructional materials in primary school classrooms in Ghana. Following interviews with teachers, head teachers and Circuit Supervisors and over 200 hours of classroom observation, researchers concluded that textbooks were not reaching the children. Most of the classrooms did not have sufficient textbooks. Even where textbooks had been supplied on textbook-pupil ratio of 1:2, children were not getting access to the books for use. The tendency was for the books to be locked up in cupboards while teachers continued their practice of copying passages on the chalkboard for pupils to read in chorus. The children were then allowed to copy the reading passages from the board into their exercise books (Yakubu et. al., 1993). Teachers explained that they avoided using the textbooks because they feared that some books would be damaged or lost and that they would be surcharged for the losses.

30. This was one finding which had an almost immediate impact. When the information was shared with policy makers in the Ghana Ministry of Education and the Ghana Education Service, immediate action was taken. Notices were circulated, stating that teachers would not be made to pay if textbooks were damaged through normal use. However, if a pupil was responsible for the loss or excessive damage of the textbook(s), the child's parents would be made to pay for the loss or damage.

31. Several additional explanations were given by teachers for not using the textbooks. The most frequently cited reason was that most of the pupils could not read the English language, let alone understand the meaning being conveyed.

32. For Ghanaian children to use the textbooks effectively and advance in the school system, they need to learn to communicate in English and become literate. Classroom observations revealed that pupils could not express themselves in English. Communication between pupils and teachers was almost non-existent. These observations and discussions with teachers that followed revealed that the textbooks did not match with children's proficiency in English, yet teachers were not adequately prepared to fill in the gap

3.3.2. Phase II of the IEQ 1 study: English language proficiency and instruction

33. Phase I findings, coupled with low scores on the first round of criterion-referenced testing (CRT), led policy-makers to encourage CRIQPEG to investigate the problem of pupils' English Language proficiency further and to identify solutions. Consequently, in 1994, CRIQPEG shifted its research objectives to focus on English language learning and to throw more light on the status of English Language.

Proficiency and instruction

34. CRIQPEG was to further stimulate and guide efforts for improvement. For the following two and a half years, researchers worked with educators, parents, and pupils from 14 rural and urban schools in the Central and Western regions of Ghana. In the first year of Phase II, all 14 schools were supplied with English and Mathematics textbooks to the textbook-pupil ratio of 1:1. Textbook supplies were replenished periodically. In addition, intervention in the form of instructional support was enhanced in 7 of the schools.

35. Before the interventions were put in place, the first task for CRIQPEG was to assess pupils' skills along a continuum from "No English language skills" to "Mastery of language skills associated with the Ghanaian curriculum" (Harris, and Dzinyela, 1997 p4), and to create diagnostic profiles of the children's skills. These profiles served as the basis for instructional intervention development, which provided a baseline for monitoring pupil achievement.

Factors affecting English language learning in Ghanaian schools

36. CRIQPEG researchers identified factors within the classroom such as teacher and pupil characteristics and behaviours as well as factors outside the classroom such as influence of parents, community, educational officers, and policy-makers, which influence pupils' English language proficiency. To do this, the researchers interviewed circuit supervisors, head teachers, teachers, parents, pupils, and community leaders. Input was sought from Ghanaian educational leaders and policy-makers. International literature was reviewed and the researchers conferred regularly with educators from outside Ghana. Discussions and follow-up interviews continued throughout the project.

Challenges

37. The biggest challenge that CRIQPEG researchers faced was developing and evaluating a process for improving language learning. Very little time was available for developing and adapting elaborate interventions. Instead CRIQPEG adopted the IEQ assessment-assimilation-action approach. Stakeholders were invited to engage in an on-going collaboration focused on improving language learning. To evaluate the process, the 14 schools involved in the study were invited to participate in the research. To ensure that all schools were comparable in terms of textbook availability, all the schools were supplied with textbooks. In addition, stakeholders from 7 of the schools, labelled intensive intervention schools, collaborated in all aspects of the assessment-assimilation-action cycles. They participated in on-going professional development workshops involving head teachers and circuit supervisors, engaged in on-site collaborative instructional support sessions, and received supplemental instructional materials. Stakeholders in the other 7 schools (Non-intensive/comparison schools) participated in only the assessment components (i.e. achievement testing, interviews, classroom observation).

38. Classroom interventions in the 7 Intensive schools focused on increasing pupils' exposure to print, encouraging practice with Oral English and adjusting instructional practice so that all pupils are successful learners. Circuit supervisors, head teachers, teachers and CRIQPEG team members collaborated to promote these goals.

39. Research instruments used for the assessment of the process included curriculum-based assessment instrument for achievement testing of the pupils, teacher rating of pupils, classroom observations, pupil observations, interviews and other measures such as family background of pupils.

3.3.3. Phase III of IEQ 1

40. During the summer of 1996, CRIQPEG researchers collected additional information to enhance the longitudinal data set and to answer questions posed by earlier findings. Follow-up pupil performance data, household education and English information, teacher ratings, and information on attendance were gathered on grade 6 pupils. Teacher and Circuit Supervisor interviews provided insight into questions about the interventions and instructional decision-making. Available textbooks were counted again, case studies on profiles of pupils targeted 3 years earlier for follow-up observations and interviews were prepared and the children and their parents were interviewed once again.

3.3.4. Overall findings

41. The overall findings of IEQ I Study are summarized as follows:

- Baseline achievement results revealed that most children's skills were far below the expectation detailed in the Ghanaian syllabuses. On the bright side, there were signs that many children were developing prerequisite language skills.
- With a few exceptions, pupil performance in Intensive and Non-Intensive Intervention schools was comparable at baseline.
- Performance of pupils in all the participating schools improved substantially between baseline and follow-up 18 months later. This is illustrated in Tables 1 and 2 below:

**Table 1 Pupils' skill profiles by grade level at baseline and follow-up
1 ½ years later**

	Baseline (February 1994)	1 ½ Years later (July 1995)
What could grade level 3 pupils do?	59% of level 3 pupils could write their names	80% of level 3 pupils could write their names
	On the average, they could write about 7 words-but 27% couldn't write any words	On the average level 3 pupils could write about 15 words
	Textbook passages were at an appropriate instructional level for decoding by about 1 out of every 10 pupils	Textbook passages were at an appropriate instructional level for decoding by about 1 out of every 3 pupils
	Textbook passages were too difficult to comprehend for all but the top 3%	Textbook passages were too difficult to comprehend for all but the top 10%
What could grade level 4 pupils do?	77% of level 4 pupils could write their names	93% of level 4 pupils could write their names
	On the average, they could write about 10 words-but 9% couldn't write any words	On the average, level 4 pupils could write about 23 words
	Textbook passages were at an appropriate instructional level for decoding by about 1 out of every 6 pupils	Textbook passages were at an appropriate instructional level for decoding by about 1 out of every 2 pupils
	Textbook passages were too difficult to comprehend for all but the top 6%	Textbook passages were too difficult to comprehend for all but the top 18%
What could grade level 5 pupils do?	95% of the level 5 pupils could write their names	96% of the level 5 pupils could write their names
	On the average, they could write about 16 words-but 4% couldn't write any words	On the average, level 5 pupils could write about 29 words
	Textbook passages were at an appropriate instructional level for decoding by about 1 out of every 3-4 pupils	Textbook passages were at an appropriate instructional level for decoding by about 1 out of every 2 pupils
	Textbook passages were too difficult to comprehend for all but the top 6%	Textbook passages were too difficult to comprehend for all but the top 18%

Note: Assessment followed a longitudinal sample, beginning in 1994 with pupils in grades 2-5. These same pupils were reassessed in 1995 when they were in grades 3-6. Thus, grade level 3 pupils who were assessed in 1994 are the same pupils who were reassessed in grade level 4 in 1995, and so on. Also, no 6th graders were tested in the baseline sample and no new 2nd grades were tested in 1995—hence profiles for 2nd and 6th grade levels are not included in this comparison.

Table 2 Pupils’ profiles for urban and rural children

	Rural	Urban
Baseline (P2-P5)	35% of rural children could write their names	92% of urban children could write their names
	Read aloud 4.6 words in 1 minute	Read aloud 20.8 words in 1 minute
	Read aloud correctly 17% of textbook passages	Read aloud correctly 49% of textbook passages
Follow-up (P3-P6)	87% of rural children could write their names	98% of urban children could write their names
	Able to write an average of 20 words in 10 minutes	Able to write an average of 39 words in 10 minutes
	Read aloud 19 words in 1 minute	Read aloud 52 words in 1 minute
	Read aloud correctly 53% textbook passages	Read aloud correctly 78% of textbook passages
	1.7 out of 8 reading comprehension questions	4.3 out of 8 reading comprehension questions

42. This may be because all the 14 schools received textbooks and all 14 schools participated in exploring factors affecting language teaching and learning.

- School leadership played an important part in the improvement process. That is, head teachers and circuit supervisors did supervise and monitor the instructional process.
- Classroom observations indicated that there were observable positive changes in instructional practices used in all participating classrooms during the course of the project.
- Based on observations and interviews, it seems likely that improvements were due in part to the increased emphasis on the teaching and learning of language in all 14 schools.
- With rare exceptions, pupil performance in Intensive Intervention schools was significantly better than that of pupils’ performance in Non-Intensive Intervention schools during the first and second years following the initial intervention efforts.
- Differences in family background did not seem to account for Intensive/Non-intensive school achievement differences. It was found that the pupils from the Non-Intensive schools came from households where English competency was perceived to be higher than that of pupils from the Intensive schools. Family size and level of education of parent/guardians and household members were found to be similar.
- At follow-up, children in the Intensive Intervention schools reported significantly better attendance than children in the Non-Intensive intervention schools. A strong correlation (0.72 for boys and 0.83 for girls) between the teacher report on school attendance and pupils’ own report on school attendance were not significant.
- Vast differences were found in the English language proficiency of pupils in urban and those of pupils in rural schools. Pupils in urban schools tended to be more proficient in English language use than their rural counterparts. The explanation could be that the urban located pupil is always exposed to materials and models as well as the influence of the mass media.
- Few gender differences in pupil’s performance in favour of boys were found although gender differences in pupils’ enrolment persisted. (1594 girls, 1873 boys).

- Results of a case study of a small sample of boys and girls suggested that boys receive more home support for education than girls.
- Teachers from both the Intensive schools and Non-intensive schools rated girls' school attendance higher than that of boys.
- Consistent with current international thinking, the level of education of guardians of females was found to be significantly higher than that of boys. This may suggest that better educated parents and guardians are more likely to send their daughters to school.

43. The factors that affect learning of English are:

- Inadequate exposure to print materials
- Inadequate allocation of time to reading
- Inadequate supply of textbooks to schools
- Lack of constant practice of oral language skills
- Ineffective teaching strategies used by teachers
- Lack of library facilities
- Feeling shy to speak English
- Inability of illiterate parents and siblings to encourage or help pupils to speak English
- Fear of making mistakes and be laughed at
- Inadequate written home assignments
- Lack of books and other printed materials for use at home
- Lack of time to read at home
- Fear of damaging books at home

Changes observed among teachers

44. Teachers consciously used various intervention techniques to improve the children's use of the English language. They include the following:

- Teachers used demonstrations, discussions and activity methods to impart knowledge and skills to the children.
- Modelling was used to correct children's mistakes with emphasis on analysis (Breaking down the task) and completing the sequence.
- Pupils who gave correct answer were praised.
- Lessons were invariably adapted to both low and high performing pupils.
- More time was given to slow performing pupils to enable them to accomplish their tasks.
- Slow and high performing pupils were put into different groups. While slower learners received more attention from the teacher, the high performing pupils were made to do extra work.
- Teachers used English language as the medium of instruction. Besides pupils were encouraged in class to express themselves in English without inhibition.
- Teachers made use of visual aids like posters, matching pictures, charts, tachistoscopes, puppets, and flashcards when teaching most of the English lessons. Real objects too were used in some cases.
- Teachers made effective use of textbooks in class.
- Teachers adopted a more positive attitude towards teaching.
- Teacher-pupil relations have improved.

Changes observed among pupils

45. Positive changes were observed among pupils in all the schools. They include the fact that:

- Pupils showed enthusiasm and willingness to learn.
- Many more children could express themselves in simple English.
- Children in the upper grades could write composition on simple topics like “My hometown”.
- At the lower grades, pupils improved in word identification and spelling of simple words like church, village, and so on.
- Children made conscious efforts to speak English; they did not laugh at each other when unusual English expressions were used.
- Children could answer comprehension questions after silent reading.
- More children had exercise books, pens, and pencils to use during class exercises.
- Textbooks were more effectively used in all the classes.
- Children occasionally took the textbooks home to study and at times used them in doing assignments.
- Children have become more regular and punctual at school.
- The intervention has cultivated reading habits in the children and therefore enhanced their knowledge on aspects of English.

Changes observed among circuit supervisors

46. Circuit supervisors played a tremendous role in monitoring the intervention:

- They paid regular visits to the schools.
- Their level of commitment was high.
- Most of them were very enthusiastic about the project and visited the project schools more often than they used to do.
- They offered valuable suggestions to teachers especially during mini-conferences held for teachers.
- Their presence prompted teachers to prepare lesson notes thoroughly and on time.

3.3.5. Conclusion from the IEQ 1 project

47. It can be concluded from the Improving Educational Quality I study that on the whole there have been drastic changes in the behaviour of teachers, pupils and circuit supervisors in the intensive schools

48. The lessons learnt from IEQ 1 project are:

- Classroom research can guide and improve innovations: The IEQ research showed that providing textbooks and in-service training for teachers can be improved by conducting classroom research. Understanding whether and how the textbooks are used and identifying the processes that can be used to enhance their use provides valuable insights to policy-makers and donor agencies.
- Classroom assessment is valuable for garnering support for quality improvement if the data is shared with stake-holders.
- Strengthening instructional support and leadership at the school level is crucial to improving the quality of education.

- Holding a national conference to share research findings builds consensus and generates further research agenda to follow-up on the findings of the research project.

Baseline and achievement gains studies for QUIPS Project

49. From March 1998 to the year 2000, CRIQPEG conducted baseline and achievement gains studies for the Quality Improvement in Primary Schools (QUIPS) Program which was initiated by USAID/Ghana and implemented by a consortium of three American consulting organisations. These are Academy for Educational Development (AED), the Mitchell Group, and Educational Development. The objective of the QUIPS Program was to assist the Ministry of Education and Ghana Education Service with its education reform program to improve the quality of basic education at the school/classroom level. The project was to be implemented in three selected schools in each of the 110 districts in Ghana.

50. In this project, CRIQPEG provided technical assistance by developing assessment instruments in English and Mathematics for grades 1-6, and by developing classroom observation protocols and profile instruments that could be used to measure/describe teacher instructional behaviour. Other instruments prepared by CRIQPEG included instruments for collecting other school profile information such as school statistics on enrolment, attendance, etc in QUIPS schools. The CRIQPEG team, between the period 1998 and 2000, administered the tests in QUIPS schools and collected other relevant statistics from the schools for the QUIPS Project.

51. After analysing the test results in English and Mathematics and other data collected from the school environment, the normal practice was that CRIQPEG team met with the local community members. At those meetings community members were asked to suggest plans that could serve as interventions for improving on their schools. In a year or two the instruments were used to collect information on achievement gains that occurred as a the result of the interventions put in place by QUIPS.

Other lessons learnt

- Whenever and wherever there was community support for schools, pupils' achievement in curriculum objectives was high, and school management improved.
- Sharing classroom and school research findings with communities and teachers enhanced their commitment to their responsibilities to the school.

Language policy implementation study

52. CRIQPEG was provided with funding by IEQ in August 1999 to re-examine Ghana's school language policy which states that, "In the first three years of primary education, the Ghanaian language prevalent in the local area is to be used as the medium of instruction, while English is studied as a subject. From Primary Four, English replaces the Ghanaian Language as medium of instruction and the Ghanaian Language is then treated as just another subject on the time-table" (enunciated and clarified in 1973 and cited in J. Dzinyela, et. al; March 2002)

53. Efforts to implement the policy have been beset with numerous challenges.

- More than sixty different languages are spoken in Ghana, hence in many cases teachers and pupils may not speak the same Ghanaian languages.
- The teacher education program does not equip teachers to teach in all Ghanaian languages.
- Printed materials for teachers and pupils in Ghanaian Languages are few.
- In many cases community members or even some teachers tend to discourage pupils from using the local language. They preferred the use of English.

Study approach

54. IEQ team in August 1999 set up a qualitative multi-site research on implementation of the language policy in Ghanaian primary schools. It was a unique collaboration of professionals from three Universities and the Ministry of Education (MOE). The team included four teacher educators (University of Cape Coast and University College of Education at Winneba), an anthropologist and a linguist (University of Ghana, Legon), one Ministry of Education administrator each from Teacher Education Division and Basic Education Division, and a project evaluation statistician.

55. The primary goal of the Language Policy Implementation study was to generate knowledge about the use of the Ghanaian Language and or English as the medium of instruction in the classroom. Six school sites were selected for the study to reflect the variety of linguistic, social and economic contexts of Ghanaian public primary schools.

56. These included:

- a) schools in the South and in the resource – poor north,
- b) urban, rural and peri-urban communities,
- c) a university-affiliated school,
- d) a “Settler” school that receives pupils from many different language backgrounds and regions,
- e) non-implementation” schools where English is the medium of instruction and where newly admitted pupils speak fluent English,
- f) over-implementation schools” where Ghanaian language is used beyond primary four and
- g) a school where teachers do not speak the same Ghanaian language(s) as the pupils.

57. Case study data were collected through systematic classroom observations, interviews with school personnel, pupils, parents, district supervisors and community members, and by examining documents such as pupil exercise books. Research teams conducted data collection in primary one through primary three classes, where a Ghanaian language is the medium of instruction, and in primary four, where pupils make the transition to instruction in English only. Researchers observed the teaching of Mathematics, English, Science (P4 only), environmental studies and culture.

Summary of research findings.

58. The case study at the six different sites have shown that the implementation of the school language policy is rather problematic. The following findings were prominent:

- Stakeholders do not have copies of the school language policy document. None of those interviewed had a copy of the circular on the policy statement. Some were aware of the policy, but many could not state it.
- Some schools were following different language policies (The English only policy, bilingual policy and Ghanaian language only policy). Three out of five public schools in the study decided not to follow the language policy at all. They decided to use English as Medium of Instruction (MOI) right from first grade.
- There was complete lack of textbooks or other curriculum materials written in Ghanaian languages. Texts on all subjects to be taught using the Ghanaian language were found to be in English. The exception was Ghanaian language supplementary readers.

- It was frequent to find teachers posted to localities where they could neither speak nor read and write the Ghanaian language there.
- Most teachers were found to have never received any in-service training in the teaching of Ghanaian language as a subject and as a medium of instruction.
- Majority of pupils declared their preference to be taught in English. Their reason was that English could help them to “get ahead in the world”. However, our classroom observations revealed that pupils participated more actively when the Ghanaian language was used.
- Teachers are aware that pupils understand better when they use the local language in their lessons, but most of them use English as medium of instruction.
- Generally, parents, head teachers, teachers, supervisors and community members preferred instruction in English. Some parents and community members however preferred the bilingual approach (use of both English and Ghanaian language).
- Some teachers in P4 (the grade where instruction is in English only) were still using the local language to explain some concepts in their lessons.
- At one site it was observed that a Ghanaian language, which was not the predominant language of the area, was being used as the medium of instruction. The reason was that the predominant language of the area is not one of the officially approved Ghanaian languages for instruction.
- The problem of multi-language groups in the same classroom/schools is not limited to urban areas: the same situation was observed in the rural school also.
- There were no records to indicate that adherence to the language policy was monitored. Consequently there was no evidence that sanctions were applied against schools that did not implement the policy.

59. In summary, as a result of multiple factors namely: absence of Ghanaian language materials, inadequately prepared teachers, lack of awareness of the school language policy, and the lack of political will to implement the policy, the language policy nation wide, has not been implemented.

4. CONCLUSION

4.1. Lessons learnt

60. The CRIQPEG/IEQ II study has a wealth of lessons to share with others. The major lessons learned include:

- a) Qualitative research makes it possible for insight to be gained into otherwise obscure areas. For example, through interactions with teachers, pupils and the community, the study of documents and the effort to find out if textbooks were available information that can inform policy implementation was yielded.
- b) Collaboration with major stakeholders facilitates a pooling of diverse experiences and skills, which can enrich the conduct and result of research. It is therefore beneficial to seek the collaboration of teachers, head teachers circuit supervisors, community leaders and even pupils.
- c) Despite communication constraints, sharing of findings with community members tends to sensitise them to their role and participation in improving school quality and school management.
- d) No matter how useful the recommendations researchers make from their research findings, politicians could make such recommendations non-functional. For example, just prior to the national seminar on the language policy, the Ghanaian Minister of Education made it clear that he did not want the USAID to support the language policy implementation effort.
- e) The success of any research centre such as CRIQPEG depends heavily on sustained funding support. All the research activities of CRIQPEG have been funded from external sources particularly, USAID.
- f) CRIQPEG has not been able to fulfil its mandate in full because of financial constraints. The situation that CRIQPEG finds itself in applies to other research facilities that experience sporadic resource inflow. There is the need therefore to brainstorm and develop strategies for sustaining the facility.

4.2. Impact of CRIQPEG

61. The meaningfulness of any research is measured by the impact of its findings on the existing state of affairs. In this regard one can say that the results of CRIQPEG's research activities have not only influenced government policy on basic education. They have also contributed to change in attitudes and teachers' and pupils' classroom practice.

- a) Since the findings of CRIQPEG on the language policy study has come out, the government of Ghana has instructed that the English language should be the medium of teaching right from the first year of basic education.
- b) Following the success of the IEQ/CRIQPEG research on the effect of textbook use, the government of Ghana has recognised the need to have each school child own textbooks in all the major subjects. The printing of textbooks in furtherance of that goal is well underway. It is expected that in the next couple of years, every child at the basic school level will own textbooks in all subject areas.
- c) Also almost every school has a School Management Committee, which in co-operation with the teachers and the head teachers, see to the smooth running of

schools. As a result, relations between teachers and the local communities have also improved.

- d) Local communities have taken up much of the provision of physical infrastructure for schools, maintenance of plant and equipment, and provision of accommodation for teachers. Research is yet to be conducted to find out if test scores have improved.
- e) The schools that participated in the IEQ/CRIQPEG program are using the innovative teaching approaches, and are doing well. It is observed that some non-partnership schools have learned from their partnership school counterparts and have also adopted the innovative teaching approaches. The snag, however, is that the teachers find the new approach really demanding on their time, and have started grumbling for doing more than what other teachers do and yet do not get remunerated for the extra work they do. Another snag is that since the IEQ project came to an end, there has not been any effort by the Ghana Education Service to promote the new approaches to teaching as a nation-wide practice.

4.3. The way forward

62. Continuous assessment is recognised the world over as a valuable means of supporting the learning process. CRIQPEG has developed classroom-based assessment instruments that can be adopted by primary schools in Ghana.

63. If better resourced CRIQPEG can expand its contribution to improving the quality of basic education drive by building training in assessment into its research activities and intervention exercise.

64. Since 1996 when IEQ I came to an end there has not been any follow-up to find out if the achievement gains have been sustained. If better resourced, CRIQPEG can conduct follow-up studies in those schools and then extend IEQ I research activities to other schools nation-wide.

65. CRIQPEG is yet to fully achieve all its mandated objectives due to lack of funds. Owing to the centre's overdependence on external funding, whenever funding is not forthcoming all its activities tend to grind to a halt.

66. In view of the plans and associated problems recounted above, and in order to support specific activities of CRIQPEG and to generally enhance the role and contribution of Higher Education in improving the quality of education at the basic level, the following specific and general recommendations are made.

4.4. Specific recommendations

- a) CRIQPEG should be assisted by the University to adopt measures to improve its skills in writing project proposals for seeking external funding.
- b) In order to expand and sustain CRIQPEG's activities aimed at improving the quality of basic education, the University of Cape Coast (UCC) should show more commitment to the Centre's work and factor the Centre's funding needs into its annual budget.
- c) UCC should additionally seek financial and technical assistance from development partners to support CRIQPEG to expend its capacity in the development of instructional materials tailored to the needs of beneficiaries.
- d) Higher educational institutions should organize outreach activities to contribute to satisfying the need and improving the quality of basic education in relevant disciplinary areas.

4.5. General recommendations

- a) Higher educational institutions should open their doors to pupils pursuing basic education programs in order to generate their interest in education and learning in general and in the acquisition of knowledge and skills in specific disciplines.
- b) The Ministry of Education should establish closer links with CRIQPEG and source funding for its activities.
- c) The Ministry of Education should establish formal structures for networking and sharing ideas with HEIs on how to improve the quality of education at the basic level.
- d) ADEA should continue to organise for the key stakeholders in education to share ideas, experiences and strategies for improving quality of basic education.
- e) ADEA should continue to facilitate consultations between Ministries of Education, Higher Educational Institutions and development partners, to discuss issues of resource mobilization for activities aimed at improving the quality of basic education. In particular, the role of the ADEA Working Group of Higher Education (WGHE) should be strengthened in this regard.

5. BIBLIOGRAPHY

- Amissah, P. et. al. (November 2001). IEQ 2/Ghana Final Report: *The Implementation of Ghana's School Language Policy*
- CRIQPEG (1996). *The English Language Proficiency of Selected Ghanaian Primary School Pupils: Phase Two Research Report*. Unpublished Research Report, University of Cape Coast, Cape Coast.
- Dzinyela, J.M. (January, 1998). *CRIQPEG Research Findings* Unpublished Research Report. Cape Coast, CRIQPEG
- Dzinyela, J.M.. (March 2001). *Transforming Languages Policy Through Dialogue and School-Based Research* Paper presented at the 45th Annual Conference of the Comparative and International Education Society, Washington, Washington D.C.
- Dzinyela, J. (March 2002). "Toward a Practical View of the National Language Policy" in *Pathways to Quality*. Arlington, V.A: American Institutes for Research.
- Ellison, S. (Spring 1995). "Educational Improvement Through Dialogue: IEQ Ghana's Approach" in *The Quality Link*. The Newsletter of the Improving Educational Quality Project. Arlington, VA: Institute for International Research.
- Harris, A.M & Dzinyela, J.M. (1997). *Fostering English Language Learning in Ghana*. Arlington, V A: Institute for International Research.
- Miske, S. (Winter 200) "School Language Policy and Bilingual Education Focus of IEQ/Ghana Project" in *The Quality Link*. The Newsletter of the Improving Educational Quality Project. Arlington, VA: Institute for International Research.