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## ABSTRACT

This study examined the impact of implementation of the Ghanaian government's mother tongue language policy, noting whether bilingual/mother tongue education would lead to improved academic achievement of elementary school students or would reinforce the marginalized position of linguistic minority children in developing countries. Data came from the Improving Educational Quality (IEQ) study and from student assessments at three elementary schools. Data were collected as students progressed through the second, third, and fourth grades. Overall, most third graders outperformed their second grade counterparts. Also, each class generally improved on their previous year's performance. Compared to the two schools that were implementing the language policy, the third school had better performance. The school with the worst performance had poorly trained teachers and used the Ghanaian language for instruction, which was not the students' first language. (Contains 10 references.) (SM)



IEQ II Ghana: A collaborative research involving the University of Cape Coast, University of Ghana, University College of Education of Winneba and the Ghana Education Service.

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**IMPROVING ACHIEVEMENT OR CONSTRUCTING MARGINALITY?  
PUPIL PERFORMANCE AND CLASSROOM LANGUAGE USE IN GHANA**

Paper Presented at the  
Comparative and International Education Society

**THE SOCIAL CONSTRUCTION OF MARGINALITY :**  
*Globalization's Impact on the Disenfranchised*

**CIES 2002 Annual Meeting**

Orlando, Florida, USA  
March 6-9, 2002

By  
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**Panel Presentation-CIES 2002**  
**Improving Achievement or Constructing Marginality? Pupil Performance and Classroom Language Use in Ghana**

**Eric Wilmot, IEQ II/Ghana and Michigan State University**

Does bilingual/mother tongue education lead to improved achievement of primary school pupils or reinforce the marginal position of linguistic minority children in societies of developing countries? The latest findings from Improving Educational Quality (IEQ) classroom research and pupil assessments in Ghana reveal the strengths, complexities, and conundrums of implementing school language policy in settings where lesser known languages are spoken. This presentation is an analysis of classroom data and pupil learning gains across three sites to reveal ways in which a loose coupling between mother tongue language policy and implementation have a negative impact on pupil achievement in public schools in Ghana.

## **INTRODUCTION**

One of the issues that dominates the literature on the role of language in education in multilingual countries is language and cognitive development. Experiences in Africa and many parts of the world have shown that cognitive development is achieved faster by using the mother tongue as language of instruction in primary education (Yates, 1995; Andoh-Kumi, 1992; Fafunwa, et. al, 1989; Hakuta, 1986; Bamgbose, 1984; Collison, 1972 ). On the contrary, when a child learns through his or her weaker language, achievement is adversely affected ( Macnamara, 1967; Skutnabb-Kangas and Toukoma, 1976; Cummins, 1976, 1978 & 1984). It is not language, per se, which determines or affects development, but the level of mastery of the language in question is the issue at stake. That is, if the medium of instruction at the early stages is the language of the learner understands very well, (s)he can understand instructions and fully participate in the educational process.

Due to these considerations and in the light of the findings of the IEQ I study in Ghana, the second IEQ study focussed on the implementation of the Ghana Government's language policy<sup>1</sup>. In this presentation classroom data and pupil learning gains across three of

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<sup>1</sup> Ghana is a multilingual country (with over 50 languages spoken within its borders) and with a fluctuating language policy. At the time of the IEQ II research, the language policy stated that;

the six project sites is analyzed to reveal ways in which a loose coupling between mother tongue language policy and implementation have a negative impact on pupil achievement in public schools in Ghana. This analysis is based on data collected within two years of the project as pupils progressed from P2 to P3 and P3 to P4 respectively.

## **DEMOGRAPHICS OF THE CHILDREN**

*Notosco:* Data collected indicated that Classes Two and Three pupils respectively reported that 92% and 85% of fathers did reading at home. The figures for mothers were lower by about over 15% for both classes. Parents' occupations differed; among them are farmers and wage earners (civil servants). Majority of classes two and three parents respectively were either teachers, office workers or farmers. The majority of mothers were traders, teachers and seamstresses. One out of five parents were in the teaching profession. About half of the fathers and one out of three mothers were in an occupation that required literacy skills. Educated parents are literate in English but less than half were literate in Kasem, the local language.

*Medofo:* Only 33% of mothers read at home. In the same school two thirds of Class three fathers and less than 60% of Class Two fathers read at home. Parents are predominantly farmers though some engage in petty trading as well.

## **TEACHER PREPARATION**

The teachers in the study have received a different kind of preparation from what is now considered adequate. What we considered adequate teacher preparation for the bilingual

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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, whilst 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 timetable

policy being implemented in schools would involve training at the teacher training college in content and structure of Ghanaian language, methodology of teaching Ghanaian language as a subject, methodology of using Ghanaian language as medium of instruction and methodological preparation in teaching English as a subject and using it as medium of instruction. None of the teachers has received what is now considered to be adequate preparation. The fact is that until 1992 Ghanaian language was optional in the teacher training college and only internal examinations were given.

**Notosco:** None of the teachers here had studied Kasem in the teacher training college. However, they were all professional teachers with four-year teachers certificate “A”

**Medofo :** All the teachers were native Ewe speakers, professional teachers and holders of the four-year teachers certificate “A”. Three out of four had studied it in the teacher training college. None of the teachers had received any in-service training in the use of Ghanaian language for instruction.

**Awocha:** The only professionally trained teacher is the P1 teacher who incidentally he is the head teacher of the school, and has taught for 16 years. He can read, write and speak Fante and English, but can only speak Ahanta. The one trained (P1) and three untrained teachers (P2, P3, P4) have all studied a Ghanaian Language either up to the basic or secondary level. Three teachers (P1, P2, P3) can speak but cannot write the predominant language of the school’s Community (Ahanta- which is not one of the 11 developed Ghanaian Languages for study and examinations respectively). The P4 teacher can neither speak nor write Ahanta.

The teachers (P1-P4) have neither received initial training in using Ghanaian Language as a medium of instruction nor learnt to teach Ghanaian Language with specific methods for teaching primary school pupils. The only trained teacher (P 1) has however

received in-service training in the teaching of a Ghanaian Language and English, which according to him, has improved his knowledge in the grammar aspects of the Ghanaian Language.

### **LANGUAGE USE INSIDE AND OUTSIDE THE CLASSROOM**

**Notosco:** On the play ground or outside the classroom when children are on break, both Kasem and English are spoken *pari pasu*. None of the teachers uses Kasem as medium of instruction. In fact the school has a policy of using English as medium of instruction.

**Awocha:** In the classroom pupils mostly interacted with each other in Ahanta when the teachers were not around. But lessons are conducted mostly in Fante, a second Ghanaian language to majority of the pupils, and occasionally English is used. Ahanta, the native language of the people, is not an officially recognized language that can be used for instruction. Hence pupils learn to read and write in Fante, a second Ghanaian language. English is a third language they learn. The P4 teacher uses both English and Fante in the classroom to ensure pupil understanding, a practice that has been labeled as “over-implementation” since he does not limit Fante to Fante classes only.

**Medofo:** Both in and out of class, pupils interacted among themselves and with their teachers mostly in Ewe. However, they occasionally asked questions or responded to some of their teachers’ questions in English when the medium of instruction is English. Like Awocha, the P4 teacher at Medofo uses both English and Ewe in the classroom to ensure pupil understanding, a practice that has been labeled as “over-implementation” since he does not limit Ewe to Ewe classes only. This raises questions about the wisdom of the three-year transitional program of mother tongue education mandated in the language policy.

## TEACHING AND LEARNING

*Notosco:* For the lower classes, teachers' pedagogical approaches center on choral repetitions combined with questions for which pupils are invited to respond individually. Small group activity is not frequent. In one case teacher exhibited disciplinarian tendencies including knocks and insults. Hands-clapping is the commonest mode of expression of approval.

In class four the lecture method is used in combination with question and answer dialogues between Teacher and pupils. The teaching pattern for classes above one, usually comprise of class teaching followed by exercise set to be carried out in class.

Except for class one, teachers usually give homework. As the school does not permit children to take home school textbooks the homework is copied into exercise books and taken home. Those who assist are mostly siblings but parents and other relations also help. In one exceptional case, a pupil reported having had private tuition at home. The language used is mostly English although Kasem is used too. From an inspection of the homework books it is clear that homework is given frequently in classes 3 and 4.

### *Medofo*

English Lessons observed in this school followed a similar pattern. They were taught mostly in English but key words were explained in a mixture of English and Ewe. However, for Mathematics, Ewe was used as medium of instruction with occasional code switching into English in P2.. The Mathematics lessons were delivered using questions and answers. The teacher code switched between Ewe and English. The lesson was taught in Ewe but most of the questions were asked in English and pupils gave number names also in English. Rewards like, "clap for him" were given in English. P3 and P4 Mathematics lessons followed similar patterns except that there were times English was the medium and Ewe used to offer

certain explanations. Most of the teachers' questions were asked in Ewe. Question and answer method was mostly used to teach lessons observed in all the classes except in English reading where teachers provided model reading and the lessons were characterized by choral class repetition.

**Awocha:** P1 to P3 teachers used choral repetition and Fante as the medium of instruction except for Mathematics which was taught in English with occasional code switching into Fante. On a few situations in P2 and P3, children were grouped for activities. The P4 teacher mostly used English as the initial medium of instruction but was compelled to switch into Fante when pupils are not able to participate. The moment this was done pupils began to participate in lessons

#### **AVAILABILITY OF MATERIALS**

Data collected reveals that the Textbook situation is far from satisfactory. Most of the subjects did not have textbooks. There were no textbooks, for instance, in Ghanaian language in any of the schools (some schools however used *The Way To Knowledge* series as textbooks). The shortage of textbooks meant that teachers spent considerable time reproducing texts or diagrams on the blackboard for general class use. In one case teacher spent almost a full lesson doing this and while she busied herself thus pupils talked and played about.

**Notosco:** English and Mathematics fared much better and each class had books on those subjects. Mathematics was generally better provided than English. Pupils were not however allowed to take home school textbooks. "They do not allow us to take the books home because people tear them", a P4 child remarked. However, some pupils had their own copies.



Class Two, 55% of the children did not have access to the mathematics text book at home but the situation in Class Three was slightly better with 51% having a mathematics textbook at home. Both classes had better access to. About 63% and 64% of Class Two and Three pupils respectively had access to the English textbook for home use. In addition, about 74% and 72% of Class Two and Three respectively had access to some other book for use at home.

**Medofo:** Generally, the amount of materials at Medofo is inadequate. Altogether, for the classes observed, the average ratio of textbooks to pupils is about 3:5 (or 1:1.67) for English, and 1:3 for Mathematics. As a result of this state of affairs, pupils are not given textbooks to take home.

In P2, there were 25 pupils. However they had only 10 textbooks for English Language (a ratio of 1 textbook to 2.5 pupils) nine for Mathematics (a ratio of slightly less than 1 textbooks to 2.5 pupils). The only extra materials were the teachers' handbooks for English and Mathematics. Pupils share books during their Mathematics lessons. Higher achievers are paired with slow learners. However for learning English Language the teacher writes on the chalkboard in addition.

The 22 pupils in P3 had relatively more textbooks than any of the other classes. For English Language, there are 17 textbooks (a ratio of almost 1 textbook to 1.3 pupils) and for Mathematics, there are 20 textbooks ( a ratio of about 1 textbook to 1 pupil).

In P4, there are 24 pupils but only one textbook for English language. The teacher is therefore compelled to write all English lessons on the chalkboard. The ratio of textbooks to pupils for Mathematics is 1:6.

**Awocha:**

**P3:** There are only 10 textbooks for the 37 pupils for both English and Mathematics, a ratio of about 1 textbook to 4 pupils.

**P3:** There are 17 English textbooks for the 17 pupils but only three Mathematics textbooks.

### ACHIEVEMENT OF PUPILS

What do these features mean for school performance? Since at some point primary schools will compete for places in the Junior and Senior Secondary Schools and would be subjected to the same nationwide examinations, it seems in order to ask whether children in a particular site here will be favored or marginalized by the kind of education that they are receiving. Achievement tests in English and Mathematics were conducted for pupils in P2 and P3 towards the 1999/200 academic year and this was repeated the following year when the children were in P3 and P4 respectively. The tests were curriculum based and covered aspects of the curriculum from P1 to the present grade. Special exams like the these have their weaknesses and may not be as reliable as one could have wished. For instance, it is impossible to test everything the pupils know. Nevertheless, they are useful for this purpose. Tables 1 and 2 show how the various schools performed on these tests.

TABLE 1: SCHOOL MEANS AND MEAN GAIN SCORES (IN %) IN P2/P3

SCH.	MODE OF IMPLEMENTATION		JUNE '00	JUNE '01	MEAN GAIN
Notosco	Non-Implementing	Math.	49.09	69.05	19.70
		Eng.	38.60	52.52	14.56
Awocha	Over-Implementing	Math.	32.03	51.72	19.69
		Eng.	27.59	27.37	-0.22
Medofo	Over-Implementing	Math.	20.50	31.25	11.25
		Eng.	24.71	29.96	4.71

TABLE 2: SCHOOL MEANS AND MEAN GAIN SCORES (IN %) IN P3/P4

SCH.	MODE OF IMPLEMENTATION		JUNE '00	JUNE '01	MEAN GAIN
Notosco	Non-Implementing	Math.	69.30	85.56	15.94
		Eng.	53.98	69.74	15.61
Medofo	Over-Implementing	Math.	32.50	40.00	7.22
		Eng.	21.90	31.55	9.66
Awocha	Over-Implementing	Math.	43.89	42.50	0.83
		Eng.	29.69	31.72	2.30

A cursory look at the two tables reveals a number of interesting patterns. First, during the first test occasion in each of the schools, with the exception of Medofo English sub-test, the P3 students out-performed their P2 counterparts. However, at Medofo the P2 pupils outperformed those in P3 on the English sub-test during the first test occasion. From tables 1 and 2 whereas the P2 pupils obtained a mean score of 24.71% in English on the first test occasions, their counterparts in P3 obtained 21.90%. Being without a teacher for quite a considerable amount of time during the year, in a school that implements the language policy, one would not be surprised at this level of performance in English in P3 since the process of language acquisition requires a continuous exposure.

Second, it can be seen that on the whole, each of the classes generally improved on their previous year's performance. These results are to be expected since on both test occasions the same test was respectively administered in each of the classes and only pupils

who took part in the first occasion were permitted to participate the following year. The only exception in this trend of performance is seen with the P2/P3 class on their English sub-test where a negative gain score of -0.22% was recorded due to a drop in performance from a mean score of 27.59% in P2 in 2000 to 27.37% the following year when the same students moved to P3.

Third, relative to Medofo and Awocha, schools that were implementing the language policy, Notosco appears to have done well. Its performance is much better than that for the two implementation schools. Being schools that implement the language policy one would have expected that pupils would understand their lessons, since the medium of instruction is the native language or a second Ghanaian language, and this understanding could have reflected in their performance. Unfortunately, the test scores on these two tables show the contrary and give the impression that the talked about advantage of the policy is a mirage. Three reasons account for this. First a look at the materials available to the pupils both at home and in school reveal that Notosco had better resources for learning than each of the implementing schools. Second, the children in the two implementing schools, Medofo and Awocha were disadvantaged by the very nature of the tests. They have been taught all their Mathematics lessons and interacted among themselves in school largely in a Ghanaian language, but the test items were all in English. Though an attempt was made to translate the items to them in Ewe and Fante respectively, it is obvious that they would have been better off if they could read it in Ewe and Fante respectively as well. On the other hand, pupils at Notosco who could read the English better and interacted among themselves in English at school(as evidenced from classroom observation data and the fact that they have been taught in English) had a double advantage listening to a translation of the test in their native

language and reading it themselves. They were therefore unduly favored in this type of test. Such advantages or marginalization would exist across schools in the country due to the fact that all examinations except those for Ghanaian language are written in English. Thus, the mode of implementation and the assessment practices that accompany it marginalizes pupils in schools that implement or over-implement the policy. A third reason, is that, the background of the parents indicate that children at Notosco with more literate parents have a better chance of receiving support at home than those at Medofo or Awocha.

It can also be seen from the two tables that, on the whole, even between the two schools that were implementing the language policy, Awocha is the least performing school. With the exception of the P2/P3 Mathematics sub-test in which they performed better than their counterparts at Medofo, pupils at Awocha had the least mean scores in the remaining tests. This weak performance at Awocha is understandable. The non-trained teachers teaching P2 to P4 at Awocha as compared to the trained teachers at Medofo may have implications for teaching practices in the two schools. This coupled with the fact that the Ghanaian language used as medium of instruction at Awocha is not the children's first language but one which majority of them come to learn in school complicates their understanding and puts them in a worse situation than the children at Medofo.

Perhaps medium of instruction is only one of the variables that affect quality of education. A conducive environment, availability of resources, and assessment practices are all important in this respect.

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