Mother Tongue Medium as an Efficient Way of Challenging Educational Disadvantages in Africa: The Case of Nigeria

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Abstract: The paper aims to examine the policy of mother-tongue medium of instruction as a way of challenging educational disadvantages and enhancing sustainable development in Africa. The overall illiteracy rate is approximately 70% and recent facts and figures from UNESCO’s 2010 Education for All Global Monitoring Report show that Africa is lagging behind in the Education for All 2015 objectives. Outcomes from regional conferences on education in Africa are reviewed, such as the 1990 Jomtien conference and the Organisation for Economic Community development and Programme for International Student Assessment consortium (OECD-PISA,2000) research on the impact of mother tongue. The article considers efforts being made in Africa in terms of mother-tongue projects, such as the Ife primary project in Nigeria, and their findings. It concludes that there is a need for a pragmatic approach to the medium of instruction whereby mother tongue and foreign languages will be on an equal basis and prevent the creation of a ‘psychological gap detrimental to all cognitive maturation and intellectual development of the child’ (Chumbow: 1986).

Keywords: Additive bilingual model, Africa, educational development, late-exit transition model, multilingualism, mother-tongue

Introduction

The case for mother tongue (MT) education is once again re-opening. One of the popular criteria used to define the mother tongue is that it is “the language one thinks, dreams and counts in” (Skutnabb-Kangas, 1981: 18).

It is easy to assume that all the above functions are the kind that one learns only in one’s primary language, and continues to perform in that language, even though later on other languages may become as important or more important to one. Other sociolinguistic research has shown that an individual who has lived for a time in a new language environment, which he or she need not even speak all that well, can come to be able to perform all the functions mentioned above i.e. to think, dream and count in the new language. In this respect, it should be noted that language is very closely related to the mind. It is the means by which we conceptualize and think, so that we normally cannot think without language. This point emphasizes the psychological importance of language to humans particularly the mother tongue as the language first learned by the child (Chumbow, 1990: 63)

The mother tongue is also the means by which orientation in the cultural environment is made. When it is considered that language is closely related to culture in that it is an expression of the common cultural experience of the members of the speech community who speak it, this point underscores the socio-cultural value of language to mankind.
The first major international support for the idea emerged at the UNESCO conference in 1951 where it was unanimously agreed that education is best carried out in the MT and recommended that pupils should begin their schooling through the medium of the mother tongue” and that “the use of the mother tongue is extended to as late a stage in education as possible.” (UNESCO, 1953)

Bamgbose (1991:2) points out that in Africa, the overall illiteracy rate is approximately 70%, while the UNESCO’s 2010 Education for All Global Monitoring Report shows that Africa is lagging behind in the Education for All (EFA) 2015 objectives. UNESCO’s facts and figures for Africa include the following data:

- One in four children in sub-Saharan Africa (out of 32 million primary school age children) does not attend school. This represents 45% of the global out-of-school population.
- About 54% of children out-of-school are girls, and almost 12 million are not enrolled.
- Over 28 million pupils drop out of school each year
- Only one in three youths attends secondary school - the lowest level in the world.
- 38% of the adult population in sub-Saharan Africa i.e. 153 million adults cannot read and write; 60% of these are women (UNESCO’s 2010 Education for All Global Monitoring Report - 2007 data)

In 2000, UNESCO through its assessment unit conducted a study of students’ achievement in several African countries, both Anglophone and Francophone, to determine the performances of pupils using foreign languages for their studies. The results of the study indicate that students struggle with the language of instruction (UNESCO, 2000), and experts reported very poor student performance in most African countries with English and French as the media of instruction. With regard to student performance on tests taken in English in Nigeria, for example, they reported:

In Nigeria when researchers administered cognitive tests of literacy, numeracy and life skills to fourth graders as part of the Monitoring Learning Achievement project, the results were described as generally poor. The mean percentage of scores was 32% in numeracy, 25% in literacy and 33% in life skills. In one test item, pupils were instructed to copy a five-line passage into a given space. Only 8% of them were able to do so accurately, and 40% were unable to copy a single word or punctuation mark (UNESCO, 2000: 34).

Similar results were reported in Senegal, where tests were administered in French. The result of this study clearly shows that the retention of European languages as the dominant media of instruction has had a serious negative impact on African education in general. This mismatch between school language and children’s home language poses serious language learning and literacy development problems for African children.

In 2001, at a UNESCO conference on cultural diversity, an appeal to enhance the learning of children through their MT was re-emphasised. The UNESCO’s position at that time had three major objectives (UNESCO, 2003: 27):
• to promote education in the MT in order to improve the quality of the curriculum and the education that children are receiving around the world, to minimize the possibility of young people being pushed out of the school system into poverty, and to therefore give them a better chance of life;
• to encourage bilingual and/or multilingual education at all levels of schooling as a means of furthering social and gender equality and as a key part of linguistically diverse societies;
• to elevate languages as a central part of inter-cultural education, and to reaffirm that literacy and mass communication are two major domains in which the role of languages is also central to national socio-economic development.

The increasing trend of global interdependence in both material and human resources shows that it is crucial for less developed and developing countries to develop their human resources quantitatively and qualitatively. In other words, both the type and quality of education offered to their citizens are vital to their overall development. It is also observed that the choice of instructional language is very important, as the selected language may enhance or hinder the quality of education. As Tucker (1999, citing Dutcher, 1994) noted in a World Bank report on language in education, individuals not only develop literacy skills more easily in a familiar language but they also develop cognitive skills and master content material more easily when they are taught in this language.

The sub-Saharan African countries that have maintained colonial languages in education continue to be among the poorest, most illiterate, and most poorly educated countries in the world (UNESCO, 2000). According to the UNESCO report on countries such as Burkina Faso, Mali, and Niger in Africa, these countries face both access and quality of education issues, with more than 70% illiteracy among the adult population and only 30% of school-age children having access to basic education. The children who attend school encounter serious educational problems due to their lack of mastery of the medium of instruction (MOI). The annual evaluations by UNESCO also indicate that the dropout rate between fifth and sixth grade is more than 30% of all students. In addition, there is a high rate of class repetition, where more than 35% of all students repeat a class or two before they finish the six years of compulsory education (UNESCO, 2000).

A Scientific Framework on Influences of Mother Tongue on Educational Variables

Research commissioned by the Organisation for Economic Cooperation and Development (OECD) in 2000, in a comparative study of educational achievements, illustrates how performances in reading and mathematics are affected by the MT. The result of the research, which focussed on the performances of 15 year old pupils, established, according to Figures 1 and 2, those factors influencing educational achievements (Programme for International Student Assessment, (PISA) 2000: 501).
Figure 1: How Reading performance is affected by the MT. Source: PISA 2000:501

**Figure 1** illustrates the influence of three external factors on pupils’ reading competency. The factors are considered to be the social background, gender and MT of the pupils. Only the MT is directly and strongly (.18) linked to the acquisition of reading competency (ADEA, 2006). **Figure 2** illustrates that MT is a direct and strong factor (.17) leading to competency in mathematics similar to the result obtained in reading test.

Figure 2: How performance in mathematics is affected by MT or language competence. Source: (PISA 2000: 503/ ADEA, 2006: 14)

Having analysed the key framework by PISA on mother-tongue as above, it is vital at this stage to consider the African approaches to MT in their educational development programmes.
Model of Language use in Education/Typology of African Language Instruction

Taking into consideration non-formal education and all levels of formal education, a typology of use of African language as a MOI is presented as follows:

Table 1: Typology of African Language Instruction

<table>
<thead>
<tr>
<th>USE/LEVEL</th>
<th>EXAMPLE OF COUNTRIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Use</td>
<td>Cote d’Ivoire, Mozambique, Cape Verde, Sao Tome and Principe</td>
</tr>
<tr>
<td>Some trials without application</td>
<td>Cameroon, Niger, Sierra Leone, Senegal, Mali, Chad, Liberia, Burkina Faso</td>
</tr>
<tr>
<td>Literacy only</td>
<td>Angola, Benin</td>
</tr>
<tr>
<td>Early Primary</td>
<td>Ghana, Nigeria, Kenya, Uganda, Zimbabwe, Malawi, Botswana, Lesotho</td>
</tr>
<tr>
<td>Full Primary or Late exit model</td>
<td>Tanzania, Somalia, Ethiopia, Eritrea, Madagascar, Nigeria (Yoruba Pilot Project only)</td>
</tr>
<tr>
<td>Secondary</td>
<td>Somalia, Madagascar, Ethiopia</td>
</tr>
<tr>
<td>Tertiary</td>
<td>No example, except in the case of metalanguage for teaching the language itself e.g. Kiswahili in Tanzania, Hausa, Yoruba and Igbo in Nigeria, Akan in Ghana and Shona in Zimbabwe.</td>
</tr>
</tbody>
</table>

Source: Adapted from Bamgbose (2000:53)

Despite the fact that Africa is a plurilingual and multicultural continent, there is no equality in the status or roles accorded to the many languages spoken in the more than 50 nation-states and territories. There are over 2000 languages in Africa but as can be seen in the example given in Table 1 above, African languages are either not used or are given only a temporary role in early primary education. In many cases, African languages designated as minority languages have been given symbolic status as national languages or even official languages in some countries but there is no socio-economic or public function attached to them. Most countries have preferred to accord prestigious national roles to an ex-colonial language or to major dominant languages. According to Bamgbose, this situation is largely responsible for the dominating illiteracy in Africa (1991: 2).

Current Studies and Research on Mother Tongue Literacy

Several current studies and research on mother-tongue literacy especially in Africa have shown that language is a fundamental medium of effective communication in educational processes and that, from a cognitive perspective, the MT should be used to establish and maintain a socio-cultural link between formal schooling and everyday languages spoken at home. (Chumbow, 1990; Fafunwa et al 1989; Robinson, 1990; Webb et al, 2004).

It has also been observed that it is through the mother languages that children first acquire social habits, feelings, skills, and other cultural norms. (Putz, 2004: 76).
According to Akinnaso (1993), there are reports of a positive correlation between the MOI and the quality of cognitive and academic achievements, as it has been demonstrated earlier in the OECD-PISA scientific experiment (PISA 2000: 501-503/ ADEA, 2006: 14).

Research such as the Ife Six Year primary project (Afolayan, 1984) and the Rivers Readers’ Project (RRP), both in Nigeria, records two of the most successful literacy programmes that were conducted on MTs on the African continent. There have also been several pilot projects on MT education in different parts of Africa directed at introducing African languages as media of instruction at primary school level. There are basically four types of pilot projects:

- **Early-exit transition model or initial medium in an African language**: this is a model where the transition from MT to foreign/official language as a MOI takes place within 1-3 years;
- **Bilingual medium**: the objective is the adoption of MT as a MOI throughout with the official/foreign language being taught as a subject, or the MT and the official/foreign language being used as two (dual) media of instruction until the end of schooling;
- **Full medium or late exit transition model**: the transition is delayed till grade 5-6, i.e. used for the entire primary education;
- **Additive bilingual education model**: MT is used as the MOI throughout, with the foreign language taught as a subject, or the MT is used in conjunction with a foreign language as dual media of instruction to the end of school. *(Adapted from Bamgbose, 2004)*

**Table 2** gives examples of each of the above mentioned models and the countries where they have taken place in Africa.

**Table 2: Selected sub-Saharan countries with MT and bilingual education projects**

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>PROGRAMME</th>
<th>YEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A) EARLY EXIT TRANSITION MODEL (2-3Years)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ghana</td>
<td>Local Languages Initial Literacy pilot project</td>
<td></td>
</tr>
<tr>
<td>(B) BILINGUAL MEDIUM (Dual System to the end of School)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cameroon</td>
<td>PROPELCA</td>
<td>Started 1981</td>
</tr>
<tr>
<td>South Africa</td>
<td>PRAESA-Multilingual Education, teacher and training of trainers programmes</td>
<td>Started 1992</td>
</tr>
<tr>
<td>Niger</td>
<td>Experimental Bilingual Schools (MEB/GZT)</td>
<td></td>
</tr>
<tr>
<td>Ghana</td>
<td>Government Bilingual Schools (Language Policy)</td>
<td>1971 – 2002</td>
</tr>
<tr>
<td>(C) LATE EXIT TRANSITION MODEL (5-6Years)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nigeria</td>
<td>Ife Six Year Primary Project (SYPP)</td>
<td>1970 – 1975</td>
</tr>
<tr>
<td>Chad</td>
<td>Teaching in National Language (GTZ/PEB)</td>
<td></td>
</tr>
<tr>
<td>(D) ADDITIVE (BILINGUAL) EDUCATION MODE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Africa</td>
<td>Limpopo Literacy Strategy</td>
<td>2004 – 2014</td>
</tr>
</tbody>
</table>

*Source: ADEA/UNESCO (UIE)/GTZ: 2006*
It is important to take a closer look at one example from each of the groups mentioned in Table 2 in order to be able to appreciate the value of each model.

**Initial or Early Transition Model (2-3 years): Rivers Readers Project in Nigeria**

The initial or early exit transition model is a single target-language system operated mostly at the initial literacy stage, with the official/foreign language as the target language. The learners may begin with the MT but then gradually move to the official/foreign language as MOI. When the transition to the official/foreign language takes place within 1-3 years it is classified as the early exit transition model (ADEA, 2006: 5).

The Rivers Readers Project in Nigeria in Table 1 was a project that was designed to introduce initial literacy in about thirty-four minority languages through their use as media of instruction in the first two to three years of primary education before shifting to an official or a national language. The languages ranged in size from over 40,000 pupils per language to 1200 pupils speaking the smallest language. Over 40 publications were produced in 15 languages during the experiment between 1970 and 1972 including primers, readers, teachers’ notes, orthography manuals and dictionaries (Williamson, 1976: 140-141). The project was successful in gaining community interest and participation, as well as creating language committees comprising of linguists and important speakers to help in the assessment of the orthographic proposal. It also contributed to a general language-planning policy and boosted the status of small languages within the community. However, the project revealed some weaknesses such as:

- a) lack of adequate support from the national authorities;
- b) lack of sufficient sources of funding;
- c) absence of fully trained and committed linguists; and

**The Bilingual Medium (Dual System to the end of School)**

The bilingual medium is defined by Bamgbose (1991: 80-83) as a sharing of roles between an indigenous language and an exogenous or imported official language. This approach is appropriate for a situation where there are many indigenous languages to consider. An example of a bilingual medium is the project carried out in Cameroon known as PROPELCA (cf. Table 1). PROPELCA was a project in a country with over 250 languages in a total population of about 12 million, with most of them being languages spoken by small populations (Tadadjeu, 1987). It started in 1981 by conducting an initial literacy experiment with basic language skills introduced in the African languages, and was then followed by the gradual introduction of French as a foreign language.

Another example of the bilingual medium approach is in South Africa, where there are over ten principal indigenous languages. The Project for the Study of Alternative Education in South Africa (PRAESA) is an independent research and development unit
which was attached to the University of Cape Town, and it was responsible for the commissioning of the bilingual medium project. The project involved the use of isiXhosa (one of the ten indigenous languages of South Africa) and English as dual MOI so it is an alternative to an outright MT medium approach (Webb, 2002; Bamgbose, 2004: 16).

**Late Exit Transition Model (5-6 Years): The Ife Six Year Primary Project (SYPP)**

This model is a single target language at the end of the school, and the target is the official/foreign language. The learners begin with the MT and then gradually move on to the official/foreign language as MOI. If the transition to the official/foreign language is delayed to grade 5-6, it is classed as the ‘late-exit transition model’ (ADEA, 2006: 5). According to Bamgbose (1991), African languages as media of instruction have generally been limited to the lower classes/grades of primary education, and their extension to upper primary classes in order to provide for a full education is rare. A good example of a pilot project which achieved a complete instruction in MT is the Six Year Primary Project (SYPP) carried out in 1970 - 1978. The project was designed to compare the traditional system of mixed-medium teaching with a new system in which Yoruba (one of the three major Nigerian indigenous languages), the MT of the pupils in the area, is used for learning and teaching for the full duration of their primary education.

The SYPP as one of the first pieces of evidence of the effectiveness of teaching in the MT, at least on the African continent, took place in Ile-Ife, Nigeria, at the Obafemi Awolowo University formerly known as the University of Ife. The project was triggered by the discontent of the parents’ association regarding the poor structure of the traditional system and in particular the falling standards of English and the indigenous languages (Bamgbose, 1976, 1984, 2000).

The main objective of the project was to develop a coherent primary education that would use the MT as the MOI (Adegbija, 2003; Afolayan, 1984; Bamgbose, 2000a; Fafunwa, 2000). The project employed the MT as the MOI on the assumption that the child would benefit cognitively, socially, culturally and linguistically through the use of MT as the language of instruction throughout the primary education. It was anticipated that this would help bridge the gap between home and school (Fafunwa, 2000: 4). The result of the pilot project shows that the language of instruction is a significant variable in the performance of pupils involved in the project. The project showed a substantial fall in the drop-out rate from schools, and also demonstrated conclusively that a child learned best in MT, affirmed by Fafunwa (2000).

**Additive Bilingual Education Model**

In the additive bilingual education model, MT is never removed as a MOI and never used less than 50% of the time and subject. With this approach, the target is a high level of proficiency in MT plus a high level of proficiency in the official/foreign language. In Africa, the kind of additive models that are applicable would be either:
• **MT throughout** with an official/foreign language taught as a subject by a specialist teacher;

• **Dual medium**: MT applicable up to at least grade 4-5, followed by gradual use of official/foreign language for up to but no more than 50% of the day/subject by the end of the school. (ADEA, 2006: 5)

An example of an additive bilingual education model is the *Limpopo literacy strategy* in South Africa. This model places emphasis on literacy in MT, and use of MT medium education for as long as possible, with the addition of at least one other language which would complement rather than replace the MT. For the majority of learners in the South African education system, this has been interpreted as home language (MT) plus English (ADEA, 2006).

Having listed all these experiments on language-in-education models, it can be observed that a major impediment, mainly with the transitional models (i.e. the early and late exits and the bilingual medium), is that the short duration of the use of MT by the pupils does not allow the attainment of language competence needed in MT (L1) in order to avoid the cognitive disadvantages when the pupils switch over to the second language (L2). Secondly, it can also be argued that transitional bilingual education models or programs do not usually bridge the learning gap but rather create it because of the delay in understanding the subject. It is also known that if the first language is allowed to stagnate when a child begins school and another language is introduced as the sole school language, there is a great risk of incomplete development of both languages. According to Akinnaso (1993: 271, citing Cummins et al, 1987), studies have shown that children aged between 9-12 make more rapid cognitive and academic progress in literacy acquisition in both the L1 and L2 than children aged between 5-8. To cite Salami (2008: 94), the critical period for effective transition to literacy should be extended from the first nine years to the first twelve years. In other words, children ought to learn in their MT (L1) until they reach the age of 12 before switching to L2 education, because at 12 years old, they would have acquired sufficient concepts in their MT and would be apt enough to transfer the acquired knowledge into L2.

The following is the summary of the research and studies analysed so far:

• L1 needs to be reinforced and developed for twelve years in order for successful L2 learning and academic success to take place (cf. Dutcher & Tucker 1995), including L1 medium for at least 6 years of formal schooling.

• The international second language acquisition (SLA) literature indicates that under optimal conditions (which do not apply in most education systems in Africa) it takes 6-8 years to learn an L2 sufficiently well enough to use it as a MOI.

• Language education models which remove the L1 as a primary MOI before grade 5 will offer little success for the majority of learners.

• Language education models which retain the L1 as a primary MOI for 6 years can succeed under very well-resourced conditions.

• Eight years of MT education may be enough under less well-resourced conditions (ADEA, 2006: 68).
The research and experiments analysed above represent a significant opportunity for the improvement of the quality of education in Africa. They provide a tool for regional researchers in education and linguists to develop in the future consideration of MT or multilingual education in Africa. The outcomes of these studies and research suggest that using African languages as media of instruction for more than 8 years and implementing multilingual language models in schools will increase the economic and social development and contribute to the improvement of knowledge and scientific development in Africa (ADEA, 2006: 7).

Two prominent African linguists can be cited in conclusion: Firstly, Prah (2003) maintains that it is only when African realities, informed by African history, language and culture, are brought to the fore that Africa can make a meaningful and worthwhile contribution to the universal fund of culture and knowledge. Secondly, Martha Qorro (2003) speaks of “unlocking language forts” in Africa. Qorro argues for enabling knowledge contained in English and other languages to be made available to a wider population in Africa by using African languages as the media for reproducing this knowledge.

The lack of use of African languages in the educational domain means that a wealth of knowledge is being locked away in those languages, and is gradually being lost. It is only by using African languages that they will become the key resources for empowering communities to combat marginalization, poverty, impoverishment and illiteracy. Utilizing African languages to represent indigenous knowledge can create the space for these languages to become an essential part of the knowledge base of African societies.

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