



Association for the Development of Education in Africa (ADEA)
UNESCO Institute for Education (UIE)
Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ)

Executive Summary

Optimizing Learning and Education in Africa – the Language Factor

**A Stock-taking Research on Mother Tongue
and Bilingual Education in Sub-Saharan Africa**

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Working Document

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Glossary

Abbreviations and Terminology

AL	African language
ALWC	African language of wider communication
BLE	bilingual education
Code-switching	switching between two languages (codes)
FL	foreign language
FLT	foreign language teaching
ILWC	international language of wider communication such as English, French, Portuguese, Spanish, Arabic
Lingua franca, pl. lingua francae	languages of wider communication, often cross border languages
L1	first language or “mother tongue” which is sometimes also called ‘home language’ or ‘language of the home’
L2	second language. In this report the term second language will be used to mean the second language learned at school for formal educational purposes, and should not be confused with a student’s second or other languages learned informally outside of school.
LoI	language of instruction (synonymes : MoI/MoE)
LOLT	language of learning and teaching (used especially in South Africa for MoI/LoI)
LWC	language of wider communication (in many cases local/familiar language)
MoI	medium of instruction
MoE	medium of education
MT	mother tongue (also: local/familiar language, the language of the immediate community which is best known to the child)
MTE	mother tongue education (we accept the term to include the use of ‘a language best known to the child’)
NL	national language
NLWC	national language of wider communication
OL	official language (also: official/foreign language – the official language as legally defined, which is in many cases, but not always, foreign to some parts of the society, in many cases even to the majority of the citizens.)
SLA	second language acquisition
SoI	Subject of Instruction

Informal language learning

Where learning takes place out of school/educational contexts. The learning of the first language/mother tongue usually takes place in informal contexts in the home and immediate community before the child goes to school. There after, it is usual that L1 acquisition is continued through the formal teaching of the mother tongue for academic purposes.

Formal language learning

Where learning takes place in formal educational contexts. There can be formal learning of the first, second, third etc. language in the school.

Bilingual education

Bilingual education (BLE) is defined in different ways. The term originally meant the use of two languages as mediums of instruction. It included, but was not restricted, to the learning of two languages as subjects. Therefore it usually means: the L1 plus an L2 as media of instruction. In South Africa bilingual education is understood as mother tongue instruction (L1 medium) throughout school plus a second language taught as a subject to a high level of proficiency.

Increasingly the term has come to be misused in some contexts, especially North America, to mean L1 for a short time (see early-exit transitional models) followed by L2 as a medium for the greater amount of time. In other words, it has become misused to mean a mainly second language education system. This misuse of the term has been transported to many countries in Africa where people label programmes bilingual even though there is very little L1 medium in place. Therefore in this report, we identify and describe the type of bilingual education programme (e.g. early exit, late exit, additive, subtractive bilingual education) to which we refer each time it becomes appropriate.

Foreign and official language:

The team agreed that both terms “foreign” and “official” language with respect to the ex-colonial languages are at times unsatisfactory. On the one hand, from the perspective of many African learners, they are foreign. On the other hand, from the social perspective, they are not foreign languages any more as they have acquired official status and they have been present for over 100 years in African countries. In addition, in the urban areas of many African countries, there are people who historically would have spoken ALs at home, but who now identify themselves as L1 speakers of Portuguese (Maputo, Luanda), French (e.g. Dakar) or English (e.g. Johannesburg, Nairobi). The team thus decided to use the double term *official/foreign language where this is appropriate*.

Local and familiar language:

Accordingly, the term local/familiar language is used to refer to the many instances, where there will be a large number of often related languages which co-exist in the environment of the child. In these situations it is unlikely that each child would be able to receive MTE in the narrow sense of the term. It is more likely and possible that education provision could be made available in a language of the immediate or local community and with which the child is familiar.

Subtractive Education Model: The objective of the subtractive model is to move learners out of MT and into the official/foreign language as a medium of instruction as early as possible. Sometimes this involves going straight to the official/foreign language medium of instruction in the first grade in school. Many “Francophone” and “Lusophone” countries in Africa use these models inherited from the colonial era. In these countries, the mother tongue is taken out of the formal school system as a medium of instruction and also as a subject of instruction.

Transition Models or Early / Late Exit models: The objective of these models is the same as the subtractive ones. It is a single target language at the end of the school, and the target is the official/foreign language. The learners may begin with the MT and then gradually move to the official/foreign language as MoI. If the transition to the official/foreign language takes place within 1-3 years it is called early exit transition model. If the transition is delayed to grade 5-6, it is called late exit transition model.

Whereas more and more “Francophone” countries in Africa are now just starting to run experimental programs based on early exit models, Anglophone Africa experienced MT education for the first 3-4 years of primary education followed by English as MoI even during the colonial era. In some cases, African languages have been used for up to six years followed by English as a MoI.

Additive (Bilingual) Education Models: In the additive education model, the objective is the use of MT as a MoI throughout (with the official / foreign language taught as a subject) or use MT plus official / foreign language as two (dual) media of instruction to the end of school. In the additive education model, MT is never removed as a medium of instruction and never used less than 50% of the day/subject. Therefore, 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:

- Mother tongue throughout with official/foreign language as a subject by a specialist teacher;
- Dual medium: mother tongue 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.

1. EXECUTIVE SUMMARY

1.1 Background and Terms of Reference

The document at hand is a stocktaking research that assesses comprehensively the experiences of mother tongue and bilingual education programmes in sub-Saharan Africa. Its overall conclusion can be summarised as **Language is not Everything in Education, but without Language, Everything is nothing in Education** (quote from the chapter by E. Wolff).

The need for the research arose out of the 2003 Biennial Meeting “Improving the Quality of Education in sub-Saharan Africa” Association of the Development of Education in Africa (ADEA) (visit www.adeanet.org for more information).

One of the major themes discussed during the 2003 Biennial Meeting was the relevance of adapting curricula and the use of African languages. The contributions on mother tongue education and bilingual education created a momentum for intense discussions and a need for further research.

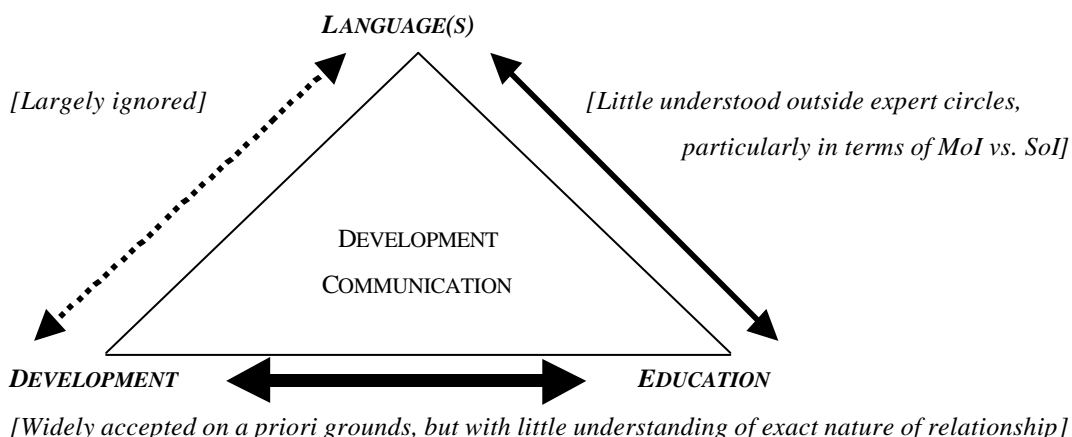
As noted in the proceedings of the biennial:

“Participants concluded that African languages were a necessary choice for the new century: “Let us return to our African identities! Let us not persist in our colonial past!” pleaded one of the ministers. However, reservations continued to be expressed by the most senior education planners from a variety of countries who had lived through the challenges of language change in the curriculum and who were familiar with the opposition on take-up of African languages in schools. A minister recalled a parent in a village saying to her: “It’s not skill in his mother tongue which makes a child succeed in life, but how much English he knows. Is it going to be one type of school for the rich and another for the poor? At the end of the day we are expected to pass examinations in English!”

In order to clarify contentious issues and to help policy-makers and educators to make informed decisions, ADEA seized the opportunity to follow up on the discussion.

As Wolff observes in chapter 2 of this report, the connection between (a) development and language use is largely ignored, the connection between (b) language and education is little understood outside expert circles and the connection between (c) development and education is widely accepted on a priori grounds, but with little understanding of the exact nature of the relationship. He visualises this “language-development-education” triangle in the following model and recommends a much closer cooperation between linguists, educationalists, and economists in the future:

Model of Development Communication with Regard to Language(s) and Education by Ekkehard Wolff



In 2005 ADEA commissioned the stocktaking research on the state-of-the-art on mother tongue and bilingual education in formal and non-formal education in sub-Saharan Africa. Given their experience and interest in the subject the UNESCO Institute for Education (UIE) and The Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) received the mandate to organise and co-ordinate the study together with ADEA. The stocktaking research addresses core questions regarding the role of language in education and development in order to unearth evidence that could inform policy and support the needed reform.

The stocktaking aims at presenting evidence-based recommendations for language-in-education policies and language use in education in order to support policy-makers and other stakeholders. The research has three objectives:

1. to document and analyze research and experiences of African countries with regard to the use of African languages as the medium of instruction and the adaptation of curricula to local context and culture;
2. to explore the state of the art of mother tongue and bilingual education with emphasis on its situation in Africa South of the Sahara;
3. to facilitate policy dialogue on the issues of the use of African languages and bilingual education.

The focus of the research was on *scientific and empirical evidence* pertaining to language use and its implications on the quality of learning and education. Six experts critically assessed existing educational programmes and related language policies. They gave (1) priority to studies which are supported by sound theoretical and empirical evidence, and (2) greater weight to independent evaluations; while consulting and paying due attention to internal evaluations including those commissioned and paid by the programmes' stakeholders were consulted. These studies were analysed for findings on learning achievements, and elements of successful implementation strategies but also elements of failure and the technical, financial, linguistic, institutional, political and social reasons given. Additionally, aspects of cost-effectiveness, equity and equality were taken into consideration. Each expert selected one or two themes based on the team's joint analysis of the issues that need to be addressed.

Initially, the researchers looked at a selection of countries (Benin, Burkina Faso, Cameroon, Chad, Ethiopia, Ghana, Kenya, Madagascar, Mali, Malawi, Mozambique, Namibia, Niger, Senegal, South Africa, Tanzania, Uganda and Zambia), which was extended during the research by additional case studies that the team could access. For an overview of the countries and programmes reviewed see below.

ADEA, UIE, GTZ and the research team consider the stocktaking research as a milestone for the improvement of the quality of education in Africa. African Ministries of Education and Financial Planning, practitioners and researchers in education are called upon to build on the experiences and resources that have been developed for mother tongue and bi- or multilingual education in Africa and to expand them. The current research suggests that using African languages as media of instruction for at least 6 six years and implementing multilingual language models in schools will not only increase considerably the social returns of investments in education, but will additionally boost the social and economic development of African nations and contribute to the improvement of the continent to knowledge creation and scientific development.

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The following countries and/or programmes in mother tongue and bilingual education in Africa were considered during the stocktaking research:

Country	Programme
Benin	
Burkina Faso	Bilingual Schools
Burkina Faso	Satellite Schools
Burkina Faso	Non-formal Basic Education Centres (NFBEC)
Botswana	Government formal education
Cameroon	PROPELCA
Chad	Programme for teaching in national language, Ministry of Education, GTZ/PEB
Eritrea	Government mother tongue education from the mid-1990s
Ethiopia	Government mother tongue education since independence
Ghana	Government bilingual schools between (1971 – 2002 language policy open for Ghanaian languages in P1-P3)
Ghana	Local Languages Initial Literacy pilot project
Ghana	ASTEP programs by GTZ
Ghana	UNICEF's Childscope project in the Afram Plains
Ghana	Shepard School Program (SSP)
Ghana	Teacher-training colleges by GTZ
Ghana	Mass printing and distribution of textbooks and teacher guides in two major languages by World Bank
Guinea (Conakry)	Government mother tongue education between 1966-1984
Guinea-Bissau	
Kenya	Rehema School
Liberia	Language and education policy for multilingual education currently under development
Mali	Écoles de la Pédagogie Convergente
Mali	Pupil Teacher Centres
Malawi	Government language education policy and Community Schools Centres d'Éducation pour le Développement (CED)
Mozambique	PEBIMO
Namibia	Village School Programme in J/'Hoan of the Nyae Nyae Foundation
Namibia	Ondao Mobile School project
Niger	Experimental bilingual schools (MEB/GZT-2PEB)
Niger	Bilingual pilot schools French-Hausa
Nigeria	Six Year Primary Project (Ife Mother Tongue Education Project)
Nigeria	Rivers Readers Project
Senegal	Community Schools (Ecole Communautaires de Base ECB)
Senegal	Non-formal education by ARED
Somalia	Government mother tongue education between 1973-1986
South Africa	PRAESA Multilingual Education, teacher and training of trainers programmes; and the LOITASA Project
South Africa	Government mother tongue education between 1955-2005
Tanzania	Government mother tongue education since independence; and the LOITASA Project
Togo	Community Schools EDIL (Ecole d'Initiative Locale)
Uganda	BEUPA by GTZ
Uganda	COPE by GTZ
Uganda	Reading Pilot Project by the Ministry of Education
Zambia	Primary Reading Program
Zambia, South Africa, Namibia, Botswana etc.	Molteno Project , Breakthrough to Literacy

1.2 Main Line of Argument

The central concern of this volume is how to provide quality education to African children and adolescents through the best-suited media and curricular content in order to achieve sustainable development in Africa.

For at least five decades, since the 1953 UNESCO Report on The Use of Vernacular Languages in Education, African countries have been struggling to find an effective strategy that allows them to move from an education system inherited from the colonial period to a more transformative and culturally relevant education that takes into consideration African values and languages, people's socio-cultural and linguistic background as well as their educational needs. Such a relevant and effective education strategy would be characterized, first of all, by the use of an appropriate medium of instruction (MoI), the use of adequate teaching techniques, the use of culturally adequate curriculum content and sufficient financial and material resources.

Currently there are two competing views with respect to the central issue of language in education. Each view is based on a different vision for African societies.

(1) The view that reflects the current practice in most African countries advocates for the continued use of the official/foreign language as the primary and ultimate MoI during the whole educational system. The current language policy and education system worked well and succeeded under the colonial system in developing the leadership needed and in training the manpower required for the Africa envisioned by the colonial powers. This colonial vision of Africa should and can no longer be the vision for contemporary Africa.

(2) The second view advocates for the use of mother tongue (MT) or a familiar national language (NL) and the official / foreign language as a MoI throughout the education system.

As a result of the stocktaking research, there are convincing evidence highlighted below to argue for the second approach, the use of mother tongue or the use of an African language familiar to the children upon school entry as the natural medium of instruction in all African schools and institutions of higher education. This approach reflects better the socio-economic and cultural realities of multilingual Africa. However, it does not advocate the rejection of the official/foreign language.

On the contrary, research evidence shows that the use of MT or NL as a medium of instruction throughout schooling improves the teaching and learning of the official/foreign language as a subject of learning and will ultimately make it a better medium of specialized learning wherever appropriate. Such a change in approach aims at bringing profound social change in terms of development and societal progress.

The research team is well aware that an educational system which emphasizes the use of African languages will only be viable if the socio-economic environment values these languages so that people with a diploma in an African language will find challenging positions where they can continue to grow professionally. It is recommended that any kind of language policy be based on the vision of the society it is designed and implemented for as well as the political economy and the sociolinguistic reality of the country.

Each chapter of this synthesis focuses on a specific strategy for optimizing learning and education in Africa, taking into consideration the language factor at various levels: policy and development, language education models, the classroom, publishing, non-formal as compared to formal education, finance and management. The main issues raised in each chapter are outlined in the following sections.

1.3 Multilingualism, Communication, Development and Education

In his chapter, Wolff aims to (i) establish the normality of multilingualism for the majority of children in Africa, (ii) draw attention to various factors that tend to impede the formulation and implementation of adequate and socio-culturally integrated language and language-in-education policies, and (iii) highlight the necessity of making language a central issue in all developmental discourse.

According to Wolff, language in Africa is a very sensitive issue mainly because of its history and its current neo-colonial relationship with former colonial powers, multilateral agencies and organizations; and yet, multilingualism and multiculturalism are integral features of African reality. This multilingualism is facilitated by the fact that Africa is home to about one third of the world's living languages. In fact, there are between 1200 and 2000 languages on the continent. This asset has been distorted as a threat to national unity and used to justify the use of the official / foreign language in government business and as the principal MoI in education consequently, missing the opportunity to build a quality education on such an asset and build on the potential of the whole population instead of a tiny minority.

To prevail over such a distortion and thus have a language-in-education policy more efficient and more effective, Wolff points out three major obstacles to overcome: (i) the uninformed attitude towards language in education by key stakeholders in Africa; (ii) western experts' negative attitudes regarding African languages, and (iii) the fact that African universities are not fulfilling the leadership role they should have in promoting and developing mother tongue education.

Overcoming these obstacles will open the path to long lasting development. Quoting Okombo (2000), Wolff argues that no matter how we define development, it cannot be seriously analyzed and discussed without reference to language as an important factor. To illustrate his argument, he stressed the following principles regarding development in Africa as underscored by Okombo (2000):

1. Modern development relies heavily on knowledge and information;
2. African countries rely significantly on foreign sources of knowledge and information, especially in the area of science and technology;
3. Knowledge and information come to Africa through international languages which are not indigenous to the African continent;
4. For development ideas to take root in Africa and benefit from African creativity, development activities must involve the African masses and not only the leaders; and
5. The goal of involving the African masses in the development activities cannot be achieved through a national communication network (including education) based exclusively on non-indigenous languages.

Knowledge and information needed for modern development cannot reach African masses that have no access to the official/foreign languages. Because knowledge and information come to Africa through the official/foreign language, the critical mass of knowledgeable and informed Africans required to achieve development will not be created in a foreseeable future. Closing the communication gap between the different levels of African societies will be a crucial and rewarding undertaking for which the education sector could take the lead role.

Development projects require communication in order to be taken on and be sustained by the local people. Such a communication can only take place through the use of languages mastered by the people (i.e. mother tongues or local, regional or national lingua-franca.). Thus, linguistic issues become inseparable from issues related to development. In fact, for development to take place in Africa, it has to be thought, designed, implemented and monitored primarily in local indigenous languages.

Contrary to popular belief, there is no proof that multilingualism correlates with poverty. Wolff points to the results of a study by Fishman (1991, quoted in Stroud 2002: 37), who "correlated 238 different economic, political, social, cultural, historical, geographic and demographic variables from across 170 countries to GNP, only to find that linguistic heterogeneity bore no predictive value for the level of per

capita GNP (Fishman 1991: 13). And, in fact, Fishman and Solano (1989) even suggest that the existence of lingua francae and bilingualism enable many polities to attain a higher per capita GNP.”

From the point of view of development therefore, a multilingual approach to education is called for; especially as multilingualism is increasing. Wolff highlights that “individual multilingualism has increased considerably involving linguae francae (such as Kiswahili, Hausa, Fulfulde, Bambara) which spread dynamically as second or third languages also into former monolingual pockets due to enhanced mobility and communication and, not the least, to education. On the other hand, demographic growth results in drastically increased numbers of people who maintain their mother tongue which they now use together with one or two other languages”.

The following table adapted from Obanya (1999a) based on a UNESCO study (1985) shows the power of African cross border languages in terms of countries covered and number of speakers (25 years later and with the population growing these figures are much higher today).

Africa’s Shared (Cross-Border) Languages, adapted from Obanya (1999a)

Language	Countries covered	Speakers
1. Fulfulde	Mauretania, Senegal, Gambia, Guinea Bissau, Guinea, Mali, Sierra Leone, Ghana, Togo, Benin, Niger, Nigeria, Cameroun, Burkina Faso	11 million
2. Kiswahili	Sudan, Somalia, Uganda, Kenya, Rwanda, Burundi, D.R.Congo, Tanzania, Malawi, Mozambique	38 million
3. Mandinka	Senegal, Sierra Leone, Guinea Bissau, Guinea, Mali, Gambia, Liberia, Côte d’Ivoire	2.8 million
4. Hausa	Niger, Chad, Cameroun, Sudan, Nigeria, Benin, Ghana	34 million
5. Songhay	Mali, Niger, Benin, Nigeria	2.4 million
6. Kanuri	Niger, Chad, Nigeria, Cameroun	2 million
7. Crioulo	Cape Verde, Guinea Bissau, Equatorial Guinea, Sao Tome e Principe	800.000
8. Fang	Cameroun, Gabon, Equatorial Guinea, Congo	800.000
9. Yoruba	Nigeria, Benin, Togo	12 million
10. Kikongo	D.R.Congo, Congo (Brazzaville), Angola	8 million
11. Luo	Uganda, Kenya, Tanzania	4 million
12. Wolof	Mauretania, Senegal, Gambia	3 million
13. Lingala	D. R. Congo, Congo (Brazzaville)	8.5 million
14. Shona	Mozambique, Zimbabwe	7 million
15. Ewe	Ghana, Togo	3.3 million
16. Dyula	Burkina Faso, Côte d’Ivoire	2 million
= 16 languages	= 34 countries	= > 140 million

The African Academy of Languages (ACALAN) and African Union (AU), for example, envision working on the international harmonization of these languages. Focussing on cross-border languages, Wolff suggests that it could be a rewarding field for cooperation, also for universities, NGOs and donor organisations, with regard to cross-border publishing potentials and the creation of a meaningful post-literacy and publishing environment for African languages.

Furthermore, another example for African often overlooked linguistic resources is the degree to which African languages are used in written communication. Obanya (1999b) suggest that about 217 African languages, which are also used in written communication, and could reach nearly 50% of the African population – provided they were literate in these languages (see table below). It should be noted that several scripts are in use in Africa and that some languages are even written in more than one script, depending on the communication context.

Country	Written Languages	Population in million	Country	Written Languages	Population in million
Benin	7	12.0	Nigeria	22	121,8
Burkina Faso	12	11,4	Uganda	3	21.3
Cameroun	38	14.3	Central Africa	4	3.5
Côte d'Ivoire	19	14.6	Senegal	6	9.0
Ethiopia	11	62.0	Sierra Leone	6	4,6
Ghana	19	18.9	South Africa	8	44.3
Guinea	6	7.7	Tchad	4	6.9
Kenya	7	29.0	Togo	13	4.4
Liberia	4	2.7	D.R.C. (Zaire)	7	49.2
Mali	9	11.8	Zambia	7	8.7
Niger	5	10.1			

Language-in-education policies are at the core of African development. In multilingual settings, the question of language choice for both medium of instruction (MoI) and subject of instruction (SoI) is crucial if Africa is to achieve development. In the multilingual approach, both the relevant local language (mother tongues or *linguae-francae*) and the official/foreign language must have their appropriate place and methods of teaching. The creative potential of Africans for modern science and technology is currently thwarted by a language barrier. It makes even more Africa dependent on expensive foreign expertise and impedes its development.

1.4 Language Education Models: Design, Outcomes and National Educational Goals

In her chapter, Kathleen Heugh looks at language education models in Africa and the use of African languages through these models. She analyses the different models in light of their design feature, potential outcomes, and their synchrony with national education goal.

As discussed in other chapters in this report, there are very many programmes, initiated by well-intentioned organizations which establish early literacy and education programmes in African languages. The considerable efforts undertaken are valuable and contribute towards a growing body of work which supports the development and use of indigenous languages across the continent. They contribute positively towards the better provision of education for children. Many non-government organizations (NGOs), donor/aid agencies, and governments have assisted in the development of early literacy and education programmes.¹ This work includes the transcription of languages which have sometimes never before been used in education and in other instances includes the development of reading and learning materials in African languages.

¹ This includes early literacy development in Ethiopia between the 7th and 13th Centuries; the teaching of literacy along with the spread of Islam across North and West Africa and reaching the highest levels of academic development in several West African languages transcribed into Arabic script at the University Mosques of Timbuktu in the 12th Century. It includes the work of missionaries from the late 19th century and renewed interest in this work over the last 30 years. Examples of the most recent work in this area include the literacy programmes in many Cameroonian languages initiated by PROPELCA; the bilingual schools (*écoles bilingues*) in Niger; 'pedagogie convergente' in Mali; bilingual experiments in Mozambique; new initial literacy programmes in Zambia; new early materials in African languages in Namibia; and the new developments in Ethiopia and Eritrea (see also Alidou, Brock-Utne and Aliou chapters in this report). Many international organisations, e.g. UNESCO Institute for Education, the Association for the Development of Education in Africa, the Summer Institute of Linguistics (SIL), and several donor/aid agencies (e.g. GTZ, SIDA, Royal Netherlands Embassy, the Flemish Government, etc), have encouraged and participated in the development of African languages in education.

Yet, with the benefit of hindsight, and new research, we can now see, that this work has to be taken further. Early education in African languages is a good thing, but if its education benefits are to be of lasting value, then mother-tongue/L1 literacy and mother-tongue medium education (MTE) needs to continue at least to the end of the sixth year/grade 6, and preferably longer. Literacy in mother tongue needs to be developed beyond the decoding of stories or narrative texts in the first three to four years of school. Mother tongue (or language best known to the child) literacy and oral language development, needs to be developed to the level that written texts and oral language used for learning and teaching mathematics, science, history, and geography can be understood and actively used by the learner. In other words, the learner needs to be able to comprehend and construct written language required for learning at upper levels of primary and secondary school. This is so that the learning process is not interrupted. If a switch in medium of instruction occurs before learners have developed high level of written as well as spoken proficiency in both the L1 and L2, then the learning process across the curriculum will be interrupted. Learners will fall behind their peers who have L1 or MTE throughout in other education systems.

In Africa, all learners need to have very good teaching of the language of high economic, educational and political status in the country (the L2 / foreign language / international language of wider communication) as a subject, so that it becomes possible to use the L2 as a **complementary** medium of learning by the second half of secondary school. It needs to be emphasised that a switch from MTE to L2 medium only is, contrary to popular wisdom, not necessary nor the best way to ensure the highest level of proficiency in the L2.

The research evidence from which we are able to draw in the early years of the 21st century provides us with a more nuanced understanding of language acquisition processes in the home and local community as well as the more structured processes which occur in and are expected in the formal education systems of countries worldwide. Informal oral language development of children, who are able to learn conversational skills in second, third or more languages quickly and easily, is not the same as the learning of a second language for formal education. It occurs very differently from the learning of language for the kind of educational challenges of the school curriculum. Children's ability to pick up and use oral speech competently and quickly while at play is often misunderstood to mean that they will be able to learn to use cognitively demanding decontextualised language for formal education in school settings quickly and easily. Unfortunately, this is a misconception. Children and adults take longer to develop the kind of language and literacy proficiency required of the schooling system than it takes them to learn enough spoken language for informal conversational purposes.

When UNESCO published its Report on the Use of Vernacular Languages in Education in 1953, it was commonly thought that if children could have mother tongue literacy and education for the first few years of school (2 – 4 years), and at the same time also learn the international language of wider communication (ILWC) as a subject, they would develop sufficiently strong literacy skills to be able to switch from mother tongue medium to L2 medium by about grade 3 or 4. We now know, that by the end of the 3rd year of school, most children in well-resourced African settings would have only a small fraction of the language skills in the ILWC/L2 that they need for learning across the curriculum

The developmental process necessary for the high level cognitive language proficiency required for successful learning across the school curriculum, takes longer than most people expect. The development of the type of literacy necessary for reading and writing about science, history and geography, or understanding problems in mathematics, becomes increasingly complex and difficult from the fourth year of school onwards. This is the case for most children worldwide and who have MTE. It is much more arduous if children are expected to do this in a language they barely know.

In her chapter, Heugh shows clearly that:

- Subtractive and early-exit transitional models can only offer students a score of between 20% and 40% in the ILWC by the end of school and this means failure across the curriculum.
- MTE needs to be reinforced and developed for at least 6 years of formal school in order for successful official/foreign language and academic success to take place.

- Under optimal conditions, it takes 6-8 years to learn a second language sufficiently well to use it as a medium of instruction. (In Africa, where the conditions are not optimal, it would probably take more years.)
- Language education models, which remove MT as a primary medium of instruction before grade 5, will facilitate little success for the majority of learners.
- Language education models, which retain MT as a primary medium of instruction for six years, can succeed under well-resourced conditions in African settings.
- Eight years of MTE can be enough under less well-resourced conditions.

1.5 Teaching Experiences: The Medium of Instruction Factor

In their first chapter Hassana Alidou and Birgit Brock-Utne present classroom observation studies conducted in several countries in Africa (Benin, Burkina Faso, Guinea-Bissau, Mali, Mozambique, Niger, South Africa, Togo, Tanzania, Ethiopia, Ghana, and Botswana). They reveal that the use of unfamiliar languages forces teachers to use traditional and teacher-centered teaching methods which undermine teachers' effort to teach and students' effort to learn. Teachers do most of the talking while children remain silent or passive participants during most of the classroom interactions. Because children do not speak the languages of instruction (LoI), teachers are also forced to use traditional teaching techniques such as chorus teaching, repetition, memorization, recall, code-switching and safe talk. In this context, authentic teaching and learning cannot take place. Such situation accounts largely for the school ineffectiveness and low academic achievement experienced by students in Africa.

In countries and schools where languages familiar to children are used as languages of instruction the studies indicate that teachers and students communicate better. Such communication leads to better teaching on the part of the teachers and better learning for students. Few countries have developed or revitalized the use of mother tongues within a bi/multilingual educational framework. Studies related to bi/multilingual education in Africa (Burkina Faso, Ethiopia, Ghana, Mali, Malawi, Tanzania Zambia to name a few) indicate that the use of mother tongues in basic education produces positive outcomes if carefully implemented. The primary beneficial aspects discussed in the literature are: the improvement of communication and interactions in the classroom and the integration of African cultures and indigenous knowledge systems into formal school curricula. Effective communication leads to more successful learning opportunities in classrooms where languages familiar to both children and teachers are used as LoI at least in the first three years of education (Alidou, 1997; Alidou and Mallam, 2003; Bamgbose, 2005; Brock-Utne, 2000; Brock-Utne, Desai, Qorro 2004; Chekaraou, 2004; Heugh, 2000; IDRC 1997; Traoré, 2001; Ouédraogo, 2003).

Moreover, when teachers teach effectively reading, writing and literacy in the mother tongues students can develop adequate literacy skills that they can use in learning the official languages. The Breakthrough Literacy Project implemented in Zambia is very illustrative of what could be done and how to improve the quality of learning and achieve better results. Its main goal is to facilitate the development of reading ability and literacy skills in both mother tongues and English among school children. The recent evaluations indicate that there is a correlation between students' literacy skills and their academic achievements (Sampa, 2003).

One of the major problems highlighted in all the reviewed studies is the inadequacy of the existing teacher training programs. In an assessment conducted by Ngu (2004) of teacher training institutions in Africa he concluded that current dominant teacher-training programs were developed before most African countries got their political independence. This implies that student-teachers are being prepared as hitherto to teach in languages that are unfamiliar to children (English, French, Spanish and Portuguese). This largely accounts for the recurrent educational problems faced by African children and the ineffectiveness of formal basic education. Due to lack of adequate training African teachers do not know how to effectively monitor and assess student learning. One should also point out that the achievement tests administered to pupils are often not valid and reliable. Consequently, one can argue

that in African contexts, it is very difficult to accurately determine the impact of teaching on students' learning.

Furthermore, teaching practice and the development of literacy are also negatively impacted by a severe lack of appropriate educational materials (teachers' guides, textbooks, and reference books in both mother tongues and second languages). Untrained teachers and teachers who do not have regular support from principals and inspectors heavily rely on available teacher's guides to develop their curriculum and lesson plans. Unfortunately, all African schools suffer from the scarcity of quality educational materials in both first and second languages. This issue is acute in bi/multilingual schools where teachers are forced to translate materials which are destined for instruction through the official or foreign language or they have to work with textbooks written in language A and their teacher guides written in language B.

All the studies mentioned in this chapter concluded with a set of common recommendations. These recommendations include: the adoption of an adequate language education policy; the reform of the teacher training programs to account for the new education language policies; the integration of innovative teaching methods, taking teachers sociolinguistic profiles into account for their placement into schools and the development of culturally relevant curricula.

Finally, teaching practice is negatively impacted by the overall socio-political contexts which are not always in favour of the expansion of the use of African languages as LoI in formal education. Teaching in mother tongues is still viewed by many Africans, as a second class occupation compared to teaching in international foreign language. This attitude affects both teachers and students' morale. Moreover, this attitude forces teachers to focus more on teaching second languages than mother tongues. Therefore, to promote effective teaching practice in bilingual schools, policy-makers should make a serious effort to politically promote the use of African languages in all spheres including their promotion as languages of instruction within bi/multilingual educational programs.

1.6 Active Students: The Medium of Instruction Factor

In their second chapter, Birgit Brock-Utne and Hassana Alidou analyse the relationship between the LoI and teaching and learning. The findings of both authors confirm what international research on learning and many African teachers also suggests: When asked to draw a profile of an effective primary teacher Ghanaian tutors placed "mastery of local language", "knowledge and respect of child's culture, "loving and caring" at the same level as "mastery of subjects and methodologies" (Chatry-Komarek, 2003: 33).

Instruction in MT or a familiar language contributes far more to the cultural, affective, cognitive and socio-psychological development of the child than instruction in the official/foreign language, Akinnaso (1993), Alidou (1997), Bergmann et al (2002), UNESCO (2003). Brock-Utne and Alidou analyse the many advantages of an education given in the mother tongue or in a familiar language of the student:

1. A very first advantage for the student is that his/her learning progression goes from the familiar to the unfamiliar, from the known to the unknown hence, respecting a basic sound pedagogical principal.
2. Studies indicate that in MTE, teachers and students communicate better. Such communication leads to better teaching on the part of the teachers and better learning for students. Teachers are more likely to use effective and student-centred teaching methods that enhance their effort to teach and students' effort to learn. Bergman and al. (2002: 66) who studied the effect of using local languages as languages of instruction in so-called experimental schools in Niger noted that: "Teachers of experimental schools...create an atmosphere of trust between the pupils and themselves [...]. Pupils in experimental schools, who are not intimidated by their

teachers, are more alert, take responsibility, [...] participate more actively in classes and contribute to helping the weaker ones.”

3. Using the students MT or a familiar language as language of instruction facilitates the integration of African culture into the school curriculum, thus creating a culturally sensitive curriculum and developing a positive perception of the culture. In addition to that, integrating the children’s culture and language into curricular activities ensures the involvement of parents into school activities, therefore making schools part of the community.
4. MTE leads to a more effective teaching of the official/ foreign language as a subject of instruction (SoI).
5. MTE leads to more effective teaching of sciences and math (Prophet and Dow 1994, Mwinsheikhe, 2002, 2003) as supported by the case of Ethiopia presented in this chapter.

Comparative studies between monolingual schools teaching in the official/foreign language and bilingual primary schools show that pupils in bilingual schools perform better in primary school leaving examinations. The following table compares results in monolingual and bilingual primary schools in Burkina Faso.

Comparative evaluation of monolingual and bilingual schools in Burkina Faso; Source: Ilboudo (2003: 48)

	Monolingual schools				Bilingual schools	
	Nomgana	Donsi B	Donsi A	Lombila	Bilingual school of Goué	Bilingual school of Nomgana
Number of pupils evaluated	44	40	42	29	25	30
Number of pupils who obtained ½ of the expected target performance	18	8	18	1	17	23
Means score of the schools	40%	20%	42.85%	3.44%	68%	76.66
Deviation	5.20-7.60	5 -6.80	5-7.50	5-5	5-8.8	5-8.60
Standard deviation	1.9-4.90	1.70- 4.80	2-4.90	1.50-4.80	1.6-4.6	3.40-4.90

The first cohort of “Ecoles Bilingues” pupils took the end of primary school examination test in 1998. After only 5 years of instruction in local languages and French, these pupils performed better than their counterparts who had six to seven years of instruction in French. In 2002, 85.02% of “Ecoles bilingues” pupils successfully passed the end of primary school examination (Ilboudo 2003). The national average is 61.81% with six to seven years of instruction in French.

MT instruction will necessitate moving from a traditional evaluation of school effectiveness that mainly looks at achievement test results to assessment methods that are more holistic. It does not matter that curriculum guidelines say that children should learn to cooperate, learn to till the land or to help in the neighbourhood, if all that is measured through tests is individual behaviour and narrow cognitive skills. Such behaviour and skills become the real, although hidden, curriculum. Assessment systems should focus more on the pupil’s ability to demonstrate mastery of knowledge acquired in schools through various kinds of practical application. Therefore, locally designed examinations to correspond to local/endogenous curricula should be undertaken.

The greatest threat to the adoption of locally adapted curricula based on indigenous knowledge systems is the reintroduction of exams created in the West, often by the Cambridge Examination Syndicate for Anglophone Africa. Professional educators know that those who construct the tests and decide on the examinations to be used are the ones who decide the curriculum. It ought to be the other way around: first a country decides on the education it wants its citizens to acquire, and then it decides how to evaluate whether desired learning has taken place. A positive example of monitoring of exams

is Namibia where a western bias in many exam questions was detected. In Burkina Faso, Mali and Niger, one of main goals of the experimental bilingual schools is to help young people develop a deeper understanding of their environment and cultures, as the majority of them are expected to remain in their community and contribute effectively to its socio-cultural and economic development.

The integration of children's culture and languages into curricular activities has facilitated parental involvement in rural schools. It also promotes a favourable attitude toward schools among parents and pupils. Parents appreciate bilingual education when they see that the overall school performance of their children improves. Ilboudo (2003) highlighted a significant achievement which may account for the effectiveness of the so-called "Ecoles Bilingues" in Burkina Faso. He reported the increased cultural learning among pupils and higher socio-economic productivity of the "Ecoles Bilingues" schools. He stated that pupils were able to benefit from these schools in a number of ways. The economic projects such as cattle breeding served to help students learn multiple subjects and integrate the indigenous knowledge system in formal basic education. In addition, pupils were able to make some financial gains. This activity helped teachers teach subject matters such as social studies, biology (breeding) and mathematics in meaningful contexts. By buying, raising and selling goats, sheep and chickens children learn how breeding is done in their own culture and in modern context. They learn new methods of modernizing some of the socio-economic activities found in their own community. Schooling, therefore, becomes more relevant not only for children as they learn by doing, but also for the parents who benefit from their children's contribution to all socio-economic and cultural activities.

The studies reported on in this chapter show that active learning takes place in programs where instruction is done in African languages known to teachers and children. The use of familiar languages alone does, however, not guarantee success. Other factors like the availability of trained teachers and having quality educational materials built on the culture of the pupils are also important. Exams need to reflect local curricula. Pupils ought to be awarded for a right answer, even if the answer is not provided in the unfamiliar/less familiar official medium of instruction.

1.7 Language Use In Non-Formal Education

This chapter's main focus is the alternative delivery mode encompassing the language factor provided by non formal education (NFE) systems that cater to children who have either dropped out of school or never had the chance to go to schools. In this chapter, Boly examines a variety of models used in the non formal education system in Africa in regard to the language of instruction and looks at what the NFE system can bring to the formal system. Based on the review of the existing literature, Boly states that there are many different models of non-formal education in Africa going from those mirroring very closely the formal school system and those evolving entirely outside of any formal education.

Some of the non-formal education efforts have been designed to allow children who are otherwise not in school to gain entry into the formal school system. Among the examples given are the COPE centers in Uganda, the Satellites Schools in Burkina Faso, Community Schools in Mali and Senegal, etc). These NFE schools use either subtractive models or early exit models. In the case of the COPE schools, teaching is straight in English (Brook-Utne, 1997); in the case of the Satellites Schools² in Burkina Faso, teaching is in the MT of the learner in the first two years. French is taught as a subject during these first two years. During the third year, French becomes the medium of instruction and the mother tongue a subject of instruction. By year four, the mother tongue is removed entirely from the programme.

² Satellites Schools in Burkina are considered part of the Primary Education in a village setting where formal classic primary school cannot be built.

Other non-formal schools provide alternatives outside of the formal education system. The models reviewed include (i) Burkina Faso's Non-formal Basic Education Centers (NFBEC), (ii) Ecoles Communautaires de Bases in Senegal, (iii) A literacy "movement" in Pulaar in Senegal mainly for adults (ARED/CERFLA³), (iv) The Centres d'Éducation pour le Développement (CED) in Mali. With the exception of ARED/CERFLA, those schools' original goal was to provide training to the learners to be active contributors to the local economy after their studies. In the NFBEC in Burkina Faso the language of instruction is the MT during the first two years of education. During year three and four, French becomes the MoI. The same situation applies to the CED in Mali and the Ecoles Communautaires de Base in Senegal. Only the literacy "movement" in Pulaar provides training throughout the MT of the learner.

This preliminary review of the different NFE models in Africa indicates that whether NFE is seen as an alternative to formal schooling, with the ultimate goal of preparing larger number of students to be productive and competitive or defined as a bridge to formal schooling, early exit models are dominant. As mentioned in the "The Tragedy of Education in Africa", Govender and Gruzd (2004) state that children need more than to learn to read, write, and do arithmetic. They need to become independent learners and critical thinkers who feel that they can better contribute to their families' and their communities' lives. A critical condition for that to happen is to train the children in their mother tongue or their dominant language of communication, be it in the formal or non formal education system.

NFE has a great potential to contribute to Education for All in Africa but (i) it has to use additive model and (ii) it needs to be seen as more than just a contributor to increase statistics. It needs to be seen as a legitimate avenue for children to achieve their full potential as active players in the economy and in social change. This can only be done if NFE is seen as a serious alternative which effectively meets the educational needs of each society.

1.8 Written Texts are the Substratum on which School Learning is built – the Publishing Sector

Strengthening the African publishing sector is a key aspect in building the African language industry which will provide the education sector with relevant teaching and learning material and will be a key player in creating a meaningful literate environment. In his chapter, Diallo looks at issues related to publishing in African Languages in the context of the current education policies and by analyzing the role of key actors, their strengths and weaknesses and making some recommendations on how to improve the situation.

He starts by underlying the fact that publishing in African languages is in its initial stage with a very limited number of books and, in most countries, it is carried out by a national government office in charge of the promotion of adult literacy. According to Diallo, the reason for this limited interest in publishing in African languages is both political and economic. The national language and education policies adopted by most countries promote official languages such as French, English, Spanish and Portuguese to the detriment of African languages. For private publishers, it is therefore more profitable to publish in these official languages than in African languages which are not allocated official functions in the administration and education and thus possess a very limited readership. Diallo goes on to describe the difficult environment in which publishing takes place in Africa, despite some progress noticed since the Jomtien conference in countries like Guinea, Senegal, Cote d'Ivoire, Burkina Faso and Mali besides most stronger presence prevailing in Kenya, Tanzania, Uganda, Nigeria, Namibia and South Africa. First, there are few professional publishers who can produce

³ ARED (Associates in Research and Education for Development) and CERFLA (*Centre d'Études pour la Recherche et la Formation en Langues Africaines*)

quality materials in African languages. Secondly, publishing textbooks requires a financial investment which most African publishers cannot afford. Thirdly, distribution is the weakest and most difficult aspect of publishing in Africa because the state and even the private sector have failed to develop an appropriate book policy.

Diallo has observed that to promote literacy in African languages, both private publishers and local NGO need financial and technical support. If international NGOs such as the Summer Institute of Linguistics (SIL), and bi-lateral and multilateral organizations such as Capacity Building International (InWent), GTZ (Deutsche Gesellschaft für Technische Zusammenarbeit), UNESCO, and Agence intergouvernemental de la Francophonie (AIF) often provide financial support to local NGOs, none is provided to private publishers who have also difficulties accessing loans from national banks. However, both local NGOs and private publishers benefit from technical assistance provided by institutions such as UNESCO, AIF, APNET (The African Publishers Network), INWENT and GTZ. This assistance contributes to capacity building at the national level.

In recent years, one can observe a noticeable expansion of publishing in African languages in countries which have created a more favourable institutional environment for the promotion of African languages as languages of instruction and communication. However, even in this situation, governments must formulate more effective language and book policies.

Finally, to promote publishing in African languages and the development of a literate culture and literate environment in both multilingual educational systems and African societies, Diallo argues that the following aspects, among others, must be seriously addressed:

- The formulation and implementation of an adequate language policy, book policy, and the promotion of a culture of reading and literacy;
- The formulation and implementation of adequate taxing systems which facilitate the importation of paper and other materials needed for the production of printed materials in Africa. Such policies can contribute to lowering the price of printed materials, especially textbooks;
- The creation of adequate distribution systems;
- Reduction of the dependence on books from abroad;
- Capacity-building in all aspects of the book chain (authors, publishers, librarians, distributors...);
- The promotion of a partnership between public and private sector in defining and implementing national language and educational policies including the design and implementation of a national book policy;
- The creation of a close partnership between governments, private publishers and non-governmental organizations at the national level for the development of a literate environment and a literate culture. This objective can be achieved if all libraries carry a significant number of reading materials written in African languages. Therefore, each country must develop and implement an adequate book distribution policy;
- A regional cooperation between African publishers to produce and distribute textbooks and other reading materials especially in the languages of wider communication such as Hausa, Pular and Mandingo;
- In all countries, the contribution of authors of books produced in African languages should be recognized and valued. This recognition should be equal to that expressed toward authors who produce textbooks and other materials in the official languages.

1.9 Financing Mother Tongue and Bilingual Education

Heugh explores some of the issues around the costs of implementing both successful and unsuccessful language education programmes and outlines some of the initiatives and strategies which can be taken, with minimal cost implications.

There are very few studies on the costs and benefits of different language in education programmes, especially in Africa. Thus, discussions about costs are often led by uninformed assumptions and related beliefs. Whenever mother tongue education issues are debated, there is a belief that it is too costly to use African languages in education. However, at the moment there is *no scientific evidence* which demonstrates that in the medium to long-term:

- the use of African languages in education is more costly than the use of the former colonial languages; or that
- the use of the former colonial languages is more cost-effective than the use of African languages in education.

An interesting result of her stocktaking is that with a little additional expenditure, education which makes greater use of local languages and provides better tuition of the international language could be implemented. Current analysis indicates that the additional expenditure may vary between 1% - 5% which will however be recovered within five years through lower repetition rates.

If we consider the evidence we do have it becomes clear that in Africa, we continue to invest in programmes which are designed to fail. System-wide, multi-country studies, such as the second Southern [and Eastern] Africa Consortium for Monitoring Educational Quality (SACMEQ II) (Mothibeli 2005), show that by grade 6 more than 55% of students in 14 Southern and Eastern Africa countries have not attained the most minimal level of literacy required to remain in the school system. Only 14, 6% have reached the desired level of literacy. The current literacy and language models are so ineffectual that they result in at least 55% of students leaving school by the end of grade 6 as unsuccessful learners, and this undermines the Millennium Development Goals and UNESCO's Education for All (EFA) agendas. It is most definitely not cost-effective or economically wise. It is therefore necessary to change from a dysfunctional approach to one which may offer a good return on investment.

As a general guideline for the understanding of costs for the implementation of language policies and models Heugh refers to the work of François Grin, one of the few economists specialized in language and the economy:

1. '...[C]osts are relatively little known and little understood ...Cost is meaningless in itself – it makes sense only in relation with what one gets in return for the cost incurred' (Grin 2005: 11).
2. 'It follows then that even a high-cost policy can be perfectly reasonable on economic grounds, if the outcome is 'worth it'; and paying for something which is worth paying for is a quintessentially sound economic decision' (Grin 2005: 13).

Heugh's comparative analysis of cost items in the delivery of quality education models (see section 3.1 in her chapter) demonstrates that the only differences occur in the areas of orthography development (where there are no existing orthographies), terminology and for translation of text books. Furthermore, these costs are lower than many people believe.

For example, studies by Halaoui (2003) and Vawda & Patrinos (1999) imply that, in most cases, the volume of text books required in African languages is large enough to ensure that the difference in cost per unit between books in European languages and books in African languages is minimal. In total, Vawda & Patrinos estimate that the additional cost of producing materials in African languages and having them used efficiently in the classroom will be less than 10% of the learning materials and teacher education budget. In South Africa an additional 10% of the cost of materials and teacher education would amount to less than 1% (closer to 0, 7 – 0, 8 %) of the entire education budget. So at most, we are looking at an additional 1% of the whole education budget in this country.

Another example is the recent translation of school leaving examinations in science in Northern Sotho (Sesotho sa Leboa) funded by the Pan South African Language Board in 2000 which was facilitated on about US\$12 000. In order to translate the examinations, the terminology had to be developed in or explained in Sesotho sa Leboa. This means that the science terminology, used to the end of secondary school, has been developed in this language on a minimal budget. Since Sesotho sa Leboa is very closely related to two other South African languages (Sesotho and Setswana) parallel translations and terminology development for science will be expedited and therefore cost less.

If teacher education provision is planned to support a functioning system and then mapped out according to different language models (see section 3.4 in the chapter), then it becomes obvious that the use of African languages is not more costly than English, French, Portuguese or Spanish dominant models.

- Firstly, teacher education requirements regarding curriculum studies, content knowledge and classroom methodologies incur the same or equal costs across all language models.
- Secondly, it does not cost more to train teachers in Africa to teach through the languages they know and speak well. It costs more to train teachers to use a language in which they do not yet have an adequate proficiency.
- Such teachers first have to learn the language through which they are required to teach and also develop a high level of academic proficiency in this language. This takes time (at least 200 hours per teacher). Time equals money.

Usually, those who argue that mother tongue education is too costly have completely underestimated the impact of the medium of instruction. They assume that teachers currently in the system are competent in the language they are supposed to use for teaching. They do not realise or sufficiently understand that the teachers cannot perform the impossible. They cannot teach through languages in which they do not have the required level of academic literacy.

In addition to these factors, the medium term economic benefits of developing the language industry in African countries should not be underestimated. It would breathe new life into tertiary education on the continent and it would open up new possibilities for employment.

Heugh recommends the following cost reduction strategies:

- Pool, share and use more effectively indigenous resources of the continent e.g. through regional co-operation, for example in joint training programmes and for cross-border languages
- Maximize existing knowledge and expertise
- Create and use checklists to better guide decisions makers and reduce ill-informed choices (suggestions see section 5.2 in the chapter)

Finally, she suggests the following 10 point plan of activities required to make further use of African languages in education (see next page).

10 point plan of activities required to make further use of African languages in education by Kathleen Heugh

	WHAT	WHO	TIME	COST: same or more
1.	Language education policy	Small consultative informed team: use experts from within Africa	2 months – electronic discussions; 2-3 meetings	Same as for any education policy/language policy development
2.	Implementation Plan	Smaller informed team	2 months	Same as for any policy implementation
3.	Public support	Education officials and experts via public media; formal & informal channels of communication	Start immediately; keep public up to date with the debates; engage public participation in debates.	Public media should carry this without cost to the state; state expenditure where possible. Same costs as for any government policy.
4.	Language Technology: terminology	Small team of experts to engage in capacity development	Speeds up timeframe for delivery	New costs but inexpensive, replicable, electronically accessible.
5.	Translation technology	University departments of African languages to re-tool/skill where necessary	Fast - can reduce translation time by 50%; can be used for textbooks and electronic resources - download assessments, worksheets etc.	Inexpensive software investment. Time reduction = cost reduction.
6.	Language development units	African universities - prepare students for orthographic, lexicographic, terminology and translation development expertise	Start training 2007	State invest in re-skilling university trainers and establishment of language development units; develop business plan - should be self-funding in 5-10 years.
7.	Dictionaries (multilingual)	Identify institutional affiliation (e.g. university/ies; government department; non-profit independent structure)	On-going – long-term project	State investment/annual allocation.
8.	Multilingual materials	a. Publishers – domestic; b. Specialist teachers can also produce these electronically.	a. Publishing timeframes require careful scheduling. b. Use of electronic education bank for storing teacher generated materials is faster and can be used almost immediately	a. Publishing: Cross-border collaboration reduces outlay costs and speeds up return on investment. Usually not much more. b. Electronic bank of materials – minimal costs. Publishing houses can recover costs and grow business in Africa
9.	Teacher Training	Re-tooling/skilling of teacher trainers; share available African expertise;	Fast-track capacity development, thereafter timeframes same as for regular provision.	Minimal costs for initial design of new programmes, soon becomes normal recurrent costs.
10.	Total Investment - additional expenditure on education budget for 5 years			1%-5% ⁴ recoverable and reduces overall expenditure over medium term (5 years). Medium to long term prognosis – economic benefits to each country.

1.10 Managing Educational Reforms

The report advocates for a paradigm shift in the definition of successful education in order to reach for cultures of effectiveness for educational systems. Such a paradigm shift, if wanted by the leaders of African countries, would require, among many other issues, to update knowledge about the key role of

⁴ Countries where orthographies and other language development units already exist can expect 1% increase; where there are no orthographies, the costs could escalate to 5%.

language-in education and development in the respective society. The paradigm shift would also give way for educational reform.

Wolff suggests that the organization and management of the ensuing communication and management processes for language and educational planning could profit from an Integrated Social Marketing (ISM) approach. Such an approach could translate the social vision for education into the social system.

Integrated Social Marketing *for non-commercial/non-profit organisations* is defined as

- the planning, organisation, implementation and control of strategies and activities of non-commercial organisations, which directly or indirectly aim at solutions to social problems/tasks;
- offering the philosophy, concepts, strategies and tools to approach social problems, and finally effectuate the desired social and cultural changes (towards “modernisation”);
- the orientation of activities towards the needs of target groups and about professional communication with the target groups; the target groups involve the general public, decision-makers and administrators, media, and professional organisations;

In particular, ISM is about communicating (new) social ideas (i.e. advocacy, dissemination, and acceptance), preparing the ground for attitudinal and behavioural change, and about negotiating social reforms such as educational reforms, particularly in view of creating the social setting of a dynamic multi-stakeholder partnership to enhance the success prospects of implementing new policies.

There are two different perspectives in ISM:

1. The institutional perspective looks at the realisation of social goals from the perspective of a given institution. This makes social marketing a leadership concept for social institutions (increasingly we observe social marketing for hospitals, political parties, museums, theatres, etc.).
2. The problem-driven perspective of social marketing focuses on the question as to what kind of techniques, methods and tools can be used for solving social problems. This happens irrespective of which organisations would be responsible for the execution of such programmes (e.g. marketing for solving problems of preservation of natural environment, fighting xenophobia, recycling, and unemployment).

The application of the ISM approach seems to be advisable in the context of language and educational planning because

- Multilingual education involves language planning.
- Language planning is both strategic and operational planning, it involves fact-finding, policy development (& governmental decision-making), implementation, evaluation.
- Language planning and formal education are both part of social planning; the target is to effect social and cultural changes.
- Language planning, particularly language planning for education, provides fundamental prerequisites for development (individual, social, cultural, economic, political development), poverty alleviation, and enjoying human rights.

This approach would support a systematic and long-term communication process for dynamic social partnerships among all stakeholders.

1.11 Conclusion

In conclusion, it is obvious that there is no education and learning where there is no communication between the teacher and the learner. And where the MoI is not mastered by either the learner or the teacher there is no efficient communication. This is still the case for most African pupils and teachers. Hence, the failure so far, we all witnessed of the education system in Africa.

This situation has been perpetuated by some of the African political elite, the former colonial powers, international agencies and organizations as well as the resistance by the African communities due to their well nurtured ignorance concerning the potential and capacity of their own languages. The research teams' findings dispel the myths that not only deny Sub-Saharan African languages the same value as for example English, French, and Portuguese but also rob African languages of their potential. The fear that efficient multilingual education would cost too much was taken seriously and a whole chapter is dedicated to this question. The good news is that the initial investment would be affordable and range most likely only from 1% to 5% of the national education budget; with the immediate, mid-term and long-term social and economic returns for the whole society and language industry not yet taken into account.

Recommendations for action such as suggestions for actions plans, checklists and management models are derived from the findings in order to ease the transfer of research results into concrete action. Appropriate language-in-education policies, promoting the use of African languages as MoI throughout the education system, along with the implementation of culturally relevant curricula, are critical conditions for reversing the current unsatisfying situation. In addition, promoting the use of African languages in the government and daily business in the private sector is the critical condition to promoting such a policy and to ensuring its success and sustainability.

Important and substantial contributions have already been made to the development and use of African languages in education on which we should build. There are for example numerous mother tongue literacy programs, transcription of oral languages, community-based and non-government based organizations, donor and development agencies, specialized university departments. Each of these initiatives needs to be encouraged in their respective settings and supported further. However their potential cannot be realized if they are subsumed into education systems which discourage the use of African languages after the initial years of early literacy or short-term mother tongue programs. Every effort should be directed towards building on these existing resources. This means extending and expanding the work of these initiatives so that the development of terminology lists, dictionaries, schoolbooks, teacher education programs, etc. is directed towards resourcing the entire school system with mother tongue education programs.

There are successful models of education language policies, used in Africa and elsewhere in the world. The use of African languages as MOI throughout multilingual educational systems models is viewed as a realistic solution for the improvement of education in Africa. It is one which requires initial investment, determination and courage, but it is also one which will show promising economic, educational and social returns.

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