Optimising Learning, Education and Publishing in Africa: The Language Factor

A Review and Analysis of Theory and Practice in Mother-Tongue and Bilingual Education in sub-Saharan Africa



Edited by Adama Ouane and Christine Glanz

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Development of Education in



Published jointly by the UNESCO Institute for Lifelong Learning (UIL), Feldbrunnenstrasse 58, 20148 Hamburg, Germany and the Association for the Development of Education in Africa (ADEA) / African Development Bank, P.O. Box 323, 1002, Tunis Belvédère, Tunisia

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ISBN 978-92-820-1170-6

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Graphic design and layout: Christiane Marwecki, cmgrafix Use of African scripts and typography inspired by Saki Mafundikwa (2007), Afrikan Alphabets: The Story of Writing in Afrika. Mark Batty Publisher, New York Printed in Germany by Mundschenk Druck- und Verlagsgesellschaft mbH, Soltau

Table of contents

- 7 Glossary (Acronyms, abbreviations and definitions)
- 15 The authors
- 17 Preface
- 21 Structure of the study

23 Executive summary

- 24 Background and history language politics and planning in Africa
- 27 Theory and practice language education models in Africa: Research, design, decision-making and outcomes
- 32 Teaching practices teaching in a familiar language
- 35 Active students learning through a language they master
- 37 Use of African languages for literacy: Conditions, factors and processes in Benin, Burkina Faso, Cameroon, Mali, Tanzania and Zambia
- 40 Costing and financing mother-tongue-based bilingual education
- 43 Optimising publishing for mother-tongue-medium bilingual education

49 Chapter 1

Background and history – language politics and planning in Africa *Ekkehard Wolff*

- 51 The language factor in education and development discourse
- 55 The complexity of the language question in Africa
- 57 The sensitivity of the language question in Africa
- 62 Multilingualism in Africa: Natural asset and resource
- 77 Language attitudes
- 90 Designing language-in-education policies for Africa
- 97 Cases: Multilingual primary education in Ethiopia, Niger, Uganda and Zambia
- 100 Recommendations

105 Chapter 2

Theory and practice – language education models in Africa: research, design, decision-making and outcomes

Kathleen Heugh

- 107 Components of language education models
- 113 Clarifying terminology used to identify language models in Africa
- 117 Convergence towards early-exit transitional models in Africa
- 119 Summarising language learning/acquisition theory
- 125 What the models can offer students by the end of secondary school
- 135 So, why do the decision-makers invest in models which cannot work?
- 149 Successful prolonged use of African languages in education
- 154 Conclusion
- 155 Recommendations

159 Chapter 3

Teaching practices – teaching in a familiar language

Hassana Alidou and Birgit Brock-Utne

- 164 Language use and teaching practices in bi/multilingual education programmes
- 177 Issues in bi/multilingual schools
- 184 Recommendations

187 Chapter 4

Active students – learning through a language they master Birgit Brock-Utne and Hassana Alidou

- 190 A look into two secondary school classrooms in Tanzania one taught in Kiswahili – one taught in English
- 194 Other studies from Africa showing the quality of learning when a familiar language is used as the language of instruction
- 199 Learning science and mathematics
- 205 Integrating education into African community life
- 209 The content of exams, assessment and the testing business
- 213 Monitoring exams: a positive example
- 214 When students are assessed through a language they do not master
- 214 Conclusion
- 215 Recommendations

4 | Table of contents

217 Chapter 5

Use of African languages for literacy: conditions, factors and processes in Benin, Burkina Faso, Cameroon, Mali, Tanzania and Zambia Hassana Alidou

- 219 Post-independence language and literacy policies
- 227 The impact of the post-independence language policies on the use of African languages and literacy
- 243 What has been learned from the review of literature on language policy and the use of African languages and literacy?
- 247 Perspectives
- 249 Recommendations

255 Chapter 6

Cost implications of the provision of mother-tongue and strong bilingual models of education in Africa

Kathleen Heugh

- 257 Continued investment in programmes designed to fail
- 258 The cost implications
- 277 Simulated cost-benefit calculations for education of students
- 281 Smart cost-reduction strategies for resourcing African languages in education
- 287 Conclusion
- 288 Recommendations

291 Chapter 7 Publications in African languages and the development of bilingual education

Yaya Satina Diallo

- 293 Contributions by this sector to the creation of a literate environment
- 301 The role of politics in promoting languages
- 302 On a national book policy
- 305 Production of school textbooks in African languages: economic problems and stakes
- 307 Conclusion and recommendations

311 Chapter 8

Promise and pitfalls – A commercial view of publishing in African languages

Peter Reiner

- 312 The history of African-language publishing in Namibia
- 314 African languages' potential to contribute to development
- 318 The practicalities of publishing in African languages
- 339 Conclusion

341 Final thoughts

345 Appendix Mother-tongue and bilingual education programmes in Africa

349 **References**

Glossary

Acronyms, institutions, organisations, initiatives, projects

ACALAN - African Academy of Languages ADALEST - Association for the Development of African Languages in Education, Science and Technology ADEA - Association for the Development of Education in Africa **AEPJLN** - Association of Editors and Publishers in National Languages **ANC** - African National Congress (South Africa) **APNET** - African Publishers' Network **ARED** - Associates in Research and Education for Development **ASTEP** - Assistance to Teacher Education Project AU - African Union **BMZ** - Federal Ministry for Economic Cooperation and Development **BPEP** - Basic and Primary Education Programme (Nepal) **CDD** - Comité Diocésain de Développement (Cameroon) **CIDA** - Canadian International Development Agency **CIES** - Comparative and International Education Society **COBET** - Complementary Basic Education in Tanzania Programme **CONFEMEN** - Conference of the Ministers of Education of francophone Africa **CONFINTEA VI** – Sixth International Conference on Adult Education **CORD** - Center for Occupational Research and Development (USA) **DANIDA** - Danish International Development Agency **DET** - Department of Education and Training (South Africa) **DFID** - Department for International Development (United Kingdom) **DNAFLA** - National Directorate of Functional Literacy and Applied Linguistics (Mali) **DoE** – Department of Education **ECD** - Education Centers for Development (Mali) **EFA** – the global initiative Education for All FONAENF - Fonds pour l'Alphabétisation et l'Education Non Formelle (Burkina Faso) **GPNAL** - Grand Prix National des Arts et des Lettres

GIZ - Deutsche Gesellschaft für Internationale Zusammenarbeit (formerly GTZ, Germany)

GTZ - Deutsche Gesellschaft für Technische Zusammenarbeit (now GIZ, Germany)

HEDCO - Higher Education For Development Cooperation of ADEA

HIPCI - Highly Indebted Poor Country Initiative

ICBAE - Integrated Community-Based Adult Education

IDRC - International Development Research Center

IEA - International Association for the Evaluation of Educational Achievement **IFOMA** Innovation, Training, Educational Materials (UNESCO project)

IIZ/DVV (now: dvv international) – German adult education development cooperation NGO

IMF – International Monetary Fund

InWEnt - Internationale Weiterbildung und Entwicklung GmbH, Capacity Building International (now GIZ, Germany)

IQE - Improvement of the Quality of Education Project

ISESCO - Islamic Educational, Scientific and Cultural Organization

LOITASA - Language of Instruction in Tanzania and South Africa project

MAPE - Mandinguo-Fulfulde Promotion Project (Mali)

MEBA - Ministère de l'Enseignement de Base et de l'Alphabétisation

MEC/NIED - Ministry of Education and Culture/National Institute of Educational Development (Namibia)

NACALCO - National Association of Cameroonian Language Committees **NEPAD** - New Partnership for Africa's Development

NEPI - National Education Policy Investigation (South Africa)

NGOs – non-governmental organisations

NLP - National Literacy Programme (Cameroon)

NORAD - Norwegian Agency for Development Cooperation

OAU - Organization of African Unity

OECD - Organisation for Economic Co-operation and Development

OIF - Organisation Internationale de la Francophonie

OSEO – Swiss Workers' Relief Agency (Oeuvre Suisse d'Entraide Ouvrière)

PRAESA - Project for the Study of Alternative Education in South Africa

PROPELCA - Programme for Language Education in Cameroon

PRP - Primary Reading Programme (Zambia)

SACMEQ II - Southern [and Eastern] Africa Consortium for Monitoring Educational Quality

SADC - Southern African Development Community

SIDA - Swedish International Development Cooperation Agency

SIL - Summer Institute of Linguistics

SNNPR - Southern Nations, Nationalities and Peoples' Region (Ethiopia) **SNV** - Netherlands Development Organisation SWAPO - South West Africa People's Organization **SYPP** - Six-Year Primary Project (Nigeria) **TIMSS** - Trends in International Mathematics and Science Study **UIE** - UNESCO Institute for Education (now UIL) **UIL** – UNESCO Institute for Lifelong Learning (formerly UIE) **UNDP** - United Nations Development Programme **UNESCO** - United Nations Educational, Scientific and Cultural Organization **UNICEF** - United Nations Children's Fund **UNIN** - United Nations Institute for Namibia **UPE** - Universal Primary Education **USAID** - U.S. Agency for International Development **WGSE** -Working Group on School Examinations (of ADEA) **WILA** - Wimbum Literacy Association (Cameroon) **WLP** - World Literacy Programme

ZAL - Zambian Alliance for Literacy

Abbreviations: technical terms

| AL | African | language |
|----|---------|----------|
| AL | Anncan | language |

- BLE or BE bilingual education
- EFL English as a Foreign Language
- ESL English as a Second Language
- FL foreign language
- FLT foreign language teaching
- FSL French as Second Language
- GER2 secondary school gross enrolment ratio
- HLT human language technology
- ICT information and communication technologies
- ILWC international language of wider communication
- L1 first language or "mother tongue", also called "home language" or "language of the home"
- L2 second language
- Lol language of instruction (also referred to as: Mol/MoE)
- LOLT language of learning and teaching (used especially in South Africa for Mol/Lol)

| LWC Mol MoE MT MTE | language of wider communication medium of instruction (also referred to as: Lol/MoE) medium of education (also referred to as: Mol/Lol) mother tongue (also referred to as: local/familiar language) mother-tongue education (the term includes the use of 'a language best known to the child', a mother tongue or local and familiar language) |
|--------------------------------|--|
| MTT | mother-tongue teaching |
| NL | national language (de jure/determined by law or de facto/ |
| | determined by use) |
| NLWC | national language of wider communication |
| PSL | Portuguese as Second Language |
| REFLECT | Regenerated Freirean Literacy through Empowering Community |
| | Techniques |
| SLA | Second Language Acquisition |
| Sol | subject of instruction |
| TESL | Teaching English as a Second Language |

Definitions: technical terms (in alphabetical order)

Bilingual education: Bilingual education is defined in different ways. The term originally meant the use of two languages as media of instruction. It included, but was not restricted to, the learning of two languages as subjects. Therefore it usually means: the mother tongue plus a second language (L2) as media of instruction. In South Africa bilingual education is understood as mother-tongue used as medium of 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 used differently in some contexts, especially in the United States, to mean mother tongue for a short time (see early-exit models) followed by the second language (L2) as a medium of instruction for the greater amount of time. In other words, it has become used to mean a mainly second language education system. The use of the term in this way has been transported to many countries in Africa where programmes may be referred to as bilingual even though there is minimal L1 medium in place. Therefore in this report, we identify and describe the type of bilingual education programme (e.g. subtractive, early-exit, late-exit, additive bilingual education) to which we refer each time it becomes appropriate.

Types of bilingual education programmes/models:

- **Subtractive Education Model:** The objective of the subtractive model is to move learners out of the mother tongue 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 year of school.¹ 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 both medium of instruction and subject of instruction.
 - **Early-Exit/Transitional Model:** The objective of this model is the same as the *subtractive* one. It is designed for fluency in a single target language for the learner by the end of school years; the target is the *official/ foreign language*. The learners may begin with the mother tongue and then gradually move to the official/foreign language as *medium of instruction*. If the transition to the official/foreign language takes place within one to four years it is called an early-exit/transition model.
 - **Late-Exit Transitional Model:** A late-exit transition model involves the delay of transition from *mother tongue as a medium of instruction* to a different target language to year five to six. An efficient late-exit model which maintains the mother tongue beyond year five to six as a subject can lead to *additive bilingualism*, where effective *first* and *second language* pedagogy is used in the classroom along with adequate content area literacy instruction.
- Additive (Bilingual) Education Models: In the additive education model, the objective is the use of *mother tongue as a medium of instruction* throughout the school years (with the official/foreign language taught as a subject) or the use of mother tongue plus official/foreign language as two (dual) media of instruction to the end of school. In the additive education model, the mother tongue is never removed as a medium of instruction and never used less than 50 per cent of the day/subject. Therefore, the target is a high level of proficiency in the mother tongue plus a high level of proficiency in the mother tongue plus a plus a high level of proficiency in the mother tongue plus a plus a high level of proficiency in the mother tongue plus a plus a high level of proficiency in the mother tongue plus a plus a plus a plus a plus a plus that are applicable would be either:

^{1.} Grade and year are used interchangeably in this report, acknowledging that all systems do not use the same terminology, especially "grade"; in other words, grade 1 and year 1 are used to mean the same thing – the first year of primary schooling, excluding kindergarten or pre-school.

- mother tongue medium throughout with official/foreign language as a subject by a specialist teacher; or
- dual medium, which refers to mother tongue to at least years four to five followed by gradual use of official/foreign language for up to but no more than 50 per cent of the day/subject by the end of the school years.
- Where a three language model of education is used (mother tongue, regional language of wider communication and international language of wider communication) it is possible that the use of the mother tongue may be reduced to accommodate an additive multilingual model (see Chapter 2).

Code-switching: switching between two languages (codes)

Foreign and official language: The 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, ex-colonial languages, though they may have become official, are foreign. From the social perspective, on the other hand, they are no longer foreign languages as they have acquired official status and in some African countries have been present for over 100 years. In addition, in the urban areas of many African countries, there are people who historically would have spoken African languages at home, but who now identify themselves as mother-tongue speakers of Portuguese (e.g. Maputo, Luanda), French (e.g. Dakar) or English (e.g. Johannesburg, Nairobi). The double term "official/foreign language" is thus used to avoid confusion where necessary or appropriate.

Formal language learning: Where learning takes place in formal educational contexts. There can be formal learning of the first, second, third language, etc., in the school and in adult education programmes.

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. Thereafter, it is usual that first language acquisition is continued through the formal teaching of the mother tongue for academic purposes. **Language (or medium) of Instruction (Lol / Mol):** The language of instruction is a language that is used for teaching and learning the subject matter of the curriculum.

Language of Wider Communication or Lingua Franca/s (LWC, ILWC, NLWC): A language of wider communication is a language that speakers of different mother tongues use to communicate with each other within a country or across borders. An international LWC is a language used in international communication such as Arabic, English, French, Portuguese, and Spanish. A national language of wider communication (NLWC) is a language used as lingua franca in a country.

Local and familiar language: 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 mother-tongue education in the narrow sense of the term. It is more likely and possible that education could be made available in a language of the immediate or local community and with which the child is familiar.

Mother tongue or first language (MT / L1): Mother tongue in the narrow sense is defined as the language that a child learns first from the person having the role of a "mother" or carer. In order to root the definition in the African linguistic reality, we define mother tongue in a broader sense as the language or languages of the immediate environment and daily interaction which "nurture" the child in the first four years of his/her life. Thus, the mother tongue is a language or languages which the child grows up with and the grammar of which the child has learned before school. In multilingual contexts, children may grow up with more than one language. In Africa children often have more than one mothertongue when several languages are spoken in the family of the child or in its immediate neighbourhood. Thus, education could be made available in one of the first languages with which the child is familiar (see below *local and familiar language*).

Second language (L2): The term second language will be used to mean a 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. The *official languages* in Africa are *foreign* to many African students and often only be learned as a second language.

- L2 enrichment here means that students are given the second language as a subject and also additional support with how to use the second language as a *medium of instruction* (e.g. specifically taught vocabulary items for particular subjects)
- **L2 pull-out** means that students are usually in a class with first language speakers of the medium of instruction and that they are taken out of the mainstream for some intensive second language instruction at various points. What happens is that the rest of the students carry on with their curriculum and the second language students fall behind.

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Preface

This publication presents the results of comprehensive research that assesses the experiences of mother-tongue and bilingual education programmes in 25 sub-Saharan African countries in recent years.¹ Its overall conclusion is encapsulated in the statement *Language is not everything in education, but without language, everything is nothing in education* (Wolff, Chapter 1).

The need for the research arose out of UIL's work on mother-tongue education (Ouane, 1995, 2003) and especially the large-scale study carried out by the Association for the Development of Education in Africa (ADEA) for the 2003 ADEA Biennial Meeting *The Challenge of Learning: Improving the Quality of Basic Education in sub-Saharan Africa.*² One of the major themes discussed during this meeting was the need to adapt curricula to the use of African languages. The contributions on mother-tongue education and bilingual education created a momentum for intense discussions and a subsequent need for further research.

As noted in the proceedings of the Biennial Meeting:

"Participants from the floor concluded with the presenters 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 to 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!" (ADEA, 2004: 38).

1 For an overview on all programmes see the Appendix.2 For more information see ADEA, 2004 and www.adeanet.org.

In order to clarify contentious issues and to help policy-makers and educators to make informed decisions about language education programmes, curricula and reading materials, ADEA decided to team up with its partners to undertake the necessary research to provide information and guidance. Hence, ADEA commissioned a research project in 2005 to take stock of the situation and analyse further possibilities for 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) (renamed UNESCO Institute for Lifelong Learning or UIL in July 2007) and the GTZ (Deutsche Gesellschaft für Technische Zusammenarbeit, renamed GIZ in January 2011) organised and coordinated the study with ADEA. The results of the research are presented in this book.

The research on mother-tongue and bilingual education in sub-Saharan Africa set out with the following four objectives:

- to document and analyse 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 state-of-the-art of mother-tongue and bilingual education with emphasis on its situation in Africa;
- 3. to analyse the role of publishing and to explore experiences of publishing in African languages; and
- 4. to facilitate policy dialogue on issues in the use of African languages and bilingual education.

Evidence-based recommendations for language-in-education policies and language use in education are made to support policy-makers and other stakeholders. 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. Existing educational programmes and related language policies were critically assessed. The researchers gave priority to studies which are supported by sound theoretical and empirical evidence, according greater weight to independent evaluations while consulting and paying due attention to internal evaluations including those commissioned and remunerated by the programmes' stakeholders. This study examines several factors which account for the successes and failures of bilingual and multilingual education programmes in Africa. These factors include linguistic, technical, financial, institutional, political, social and economic issues. Additionally, key elements contributing to quality education – aspects of cost-effectiveness, equity and equality – are taken into consideration. Initially, the researchers looked at a selection of countries (Benin, Burkina Faso, Cameroon, Chad, Ethiopia, Ghana, Kenya, Madagascar, Malawi, Mali, Mozambique, Namibia, Niger, Senegal, South Africa, Tanzania, Uganda and Zambia); further countries were included during the research when the research team were able to access additional case studies. For an overview of the countries and programmes reviewed, see the Appendix of this book. Each expert selected one or two themes based on the team's joint analysis of which issues would need to be addressed. Furthermore, two African publishers from Guinea and Namibia share their experiences and strategies for publishing in African languages.

The research team found that the interconnectedness between language, communication and effective teaching and learning is misunderstood outside expert circles; and the connection between development and education is widely accepted on *a priori* grounds, but with little understanding of the exact nature of the relationship. For the future, a much closer cooperation between linguists, educationalists and economists is therefore recommended.

ADEA, UIL, GIZ and the research team consider this review and research a milestone for the improvement of the quality of education in Africa. Since the report was discussed in an expert meeting in 2005 hosted by Namibia and at the ADEA Biennial in 2006 hosted by Gabon, it has laid a new foundation for indepth discussions among experts, practitioners, stakeholders and government officials charged with education planning and implementation as well as evaluations of such programmes and the development of new strategies for mother tongue and bilingual education in Africa. In order to support decisionmakers with key evidence from this research and a broad array of experiences and sources from around the world, UIL in collaboration with ADEA has published an advocacy brief on why and how Africa should invest in African languages and multilingual education (Ouane and Glanz, 2010). In January 2010, as a measure to facilitate the promotion of mother-tongue-based multilingual and multicultural education and learning cultures, Ministers of Education from 18 African countries adopted policy guidelines on the integration of African languages and cultures into education systems, which were informed by evidence from this research (ADEA, 2010; Annex 1 in Ouane and Glanz, 2010).

African Ministries of Education and Financial Planning, practitioners, researchers and funding agencies 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 socio-culturally relevant curricula using African languages as the medium of instruction for at least six years and implementing multilingual language models in schools will not only improve the quality of education but also increase the social returns to investments in education. It will liberate a critical mass of creative energies and empower individuals and communities. Ultimately, it will boost the social and economic development of African nations and improve the continent's economic development and contribution to knowledge creation.

Adama Ouane Director UNESCO Institute for Lifelong Learning Ahlin Jean-Marie Byll-Cataria Executive Secretary Association for the Development of Education in Africa

Structure of the study

This analytical review consists of three sections. The first section lays the theoretical foundations and is covered by Ekkehard Wolff and Kathleen Heugh: 1) language politics and planning in the light of development and 2) theories of bi- and multilingual education models and their implementation in the African context. A second section analyses teaching practices and classroom interaction in schools in two chapters by Birgit Brock-Utne and Hassana Alidou. This is followed by a review of the use of African languages in literacy and non-formal education by Hassana Alidou'. Next, a review study by Kathleen Heugh addresses the critical issue of costs by assessing the costs related to implementing mother tongue and strong bilingual education programmes. Finally, the third section explores the role of locally-based multilingual publishing in supporting and promoting African languages and developing the language industries and the creative sector. Here, Yaya Satina Diallo from Guinea and Peter Reiner² from Namibia shed light on the promise and pitfalls of publishing in African languages.

Each of these sections focuses on theoretical frameworks and specific strategies designed to optimise learning and education in multilingual Africa. The language issue is dealt with at the levels of: policy and development; costing and financing; educational reform and governance; education models; classroom interaction; formal and non-formal education settings; literacy and publishing.

1 This study was prepared for the ADEA Biennial 2006.

2 This study was prepared for the Regional Conference and Expert Meeting on Bilingual Education and the Use of Local Languages held from 3 to 5 August 2005 in Windhoek, Namibia, organised by ADEA, GTZ (now GIZ) and UIE (UNESCO Institute for Education, now UIL).

Executive summary

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

For at least five decades, since the 1953 UNESCO Report *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 system that takes into consideration African values and languages, specific socio-cultural and linguistic backgrounds as well as particular educational needs. Such a relevant and effective education strategy would be characterised, first of all, by the use of an appropriate medium of instruction, 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 medium of instruction throughout the entire educational system. This view refers to substractive and early-exit bilingual education models.
- (2) The second view argues that the viewpoint above reflects the colonial vision of Africa which should not and can no longer be the vision for contemporary Africa. It advocates for the use of mother tongues or familiar languages as primary media of instruction and for the gradual introduction of the official/ foreign language throughout the education system. This view refers to lateexit and additive bilingual education models.

As a result of this research, there is convincing evidence to argue for the second approach: the use of mother tongue (often an African language), i.e. a language familiar to the child upon school entry, as the natural medium of instruction in all African schools. This approach better reflects the socioeconomic and cultural realities of multilingual Africa. It does not advocate the rejection of the official/foreign language, but emphasises educational needs on a continent with a multiplicity of languages found at all geographical levels – villages and towns that are either rural and remote or rural and accessible – and on urban, national and regional scales.

Furthermore, the evidence shows that the use of mother tongues as media 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 specialised learning wherever appropriate. Such a change in approach aims to bring profound social change in terms of development and societal progress.

The research team is well aware that an educational system which emphasises the use of African languages will only be viable if the socioeconomic environment values these languages so that people with a diploma obtained through schooling 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.

Background and history – language politics and planning in Africa

In chapter 1, Ekkehard Wolff (i) argues for accepting multilingualism as a norm for the majority of the population in Africa; (ii) pinpoints several obstacles to adequate and socioculturally integrated language and language-in-education policies; and (iii) advocates for understanding that there is no development without effective communication, which entails taking the language factor into consideration in all sectors (Robinson, 1996; Obanya, 1999b; Rabenoro, 1999; Alexander, 2000b, 2003; Okombo, 2000; Wolff, 2000a, b, 2003b, 2004; Stroud, 2002; Alidou, 2003; PRAESA, 2003; Djité 2008). In order to move forward and deepen the understanding of the complex inter-relationship between language, education, poverty and development, interdisciplinary research and collaboration will be highly important. The knowledge and communication gaps between economists, development planners, political scientists and analysts, sociolinguists and educationists need to be bridged.

With between 1,200 and 2,000 languages, multilingualism and multiculturalism are the norm in Africa. Yet language is a sensitive issue in Africa mainly because of its history and its current neo-colonial relationship with former colonial powers, multi-lateral agencies and organisations (Mateene, 1980; Wardaugh, 1992; Mazrui, 1997; Philippson, 1997; Alexander, 1999; Bamgbose, 2000a, 2003; Alidou and Jung, 2002; Annamalai, 2003; GTZ, 2003). Multilingualism in Africa is widely perceived as a threat to national unity and the economy, leading national governments to justify obliging the majority of their citizens to use one official, often foreign, language, particularly in the educational setting. Consequently, the opportunity is missed to build a quality education system on the potential of the majority of the population instead of a minority which masters the official language. This choice has resulted in a communication and knowledge gap between a small elite and the majority of the population. Contrary to the belief that multilingualism is a threat, studies on multilingualism and development suggest that multilingualism is a resource, even in economic terms, because there is research evidence that "lingua francas and bilingualism enable many polities to attain a higher per *capita* GNP" (Stroud, 2002: 37).

In order to root development in African realities and to keep pace with the demands of today's fast developments, internal and external resources should be pooled in a non-antagonistic way (World Bank, 1989; Okombo, 2000). In this endeavour, African languages are the key to African realities. They are the means of communication for the majority of the people in Africa and should be recognised, valued and developed as such. International languages of wider communication such as English are the key to international resources and in many African countries are also the key to communication at national level. However, it should be noted that international languages of wider communication are second languages to most people in the world and should be taught as such but not as the primary language (Mateene, 1980). Thus, an education system that promotes *multilingualism* throughout the system with the aim that learners acquire *high proficiency levels* in local, regional and international languages is a wise choice because language and especially multilingualism is an important resource.

Exploring language use in Africa will be instrumental in finding new strategies for more social cohesion and a multilingual education system. In a "polyglossia pyramid" (Figure 1.3 Chapter 1) Wolff portrays the hierarchy in the current multilingual communication landscape. Obanya (1999b) found that about 217 African languages, which are also used in written communication, could reach nearly 50 per cent of the African population – provided they were literate in these languages. In the 1990s 16 African cross-border languages were already spoken by 16 million people (Obanya, 1999a); exploring their potential for inter-African communication, publishing and education will be rewarding. The African Academy for Languages (ACALAN) has this issue on its agenda.

There are three major obstacles to overcome in order for more efficient and effective language-in-education policies to be established: (1) key stakeholders are uninformed about language in education; (2) Western experts have negative attitudes towards African languages and (3) African universities have not taken the lead in developing and promoting mother-tongue and bi-/multilingual education (Adegbija, 2000; PRAEASA, 2003).

To overcome the obstacles, education should be viewed as a societal project that aims to sustain economic and socio-political development. It thus needs to face the following challenges (Okombo, 2000: 43) for education and development in Africa:

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

From the review and analysis of the background and history of language politics and language planning for education in Africa a clear consensus emerged. Social planning should be based on language politics that reflect the multilingual and multicultural heritage of the people planned for, and should be guided by clear visions for a free and democratic society. This requires a clear stance (see e.g. Bamgbose 1990, 2000a), i.e. clear policy objectives, statements, planning and communication, sanctions for non-compliance with language-related rights and policies, adequate language development and sufficient resource allocation to implement quality mother-tongue-based late-exit or additive multilingual education.

Theory and practice – language education models in Africa: Research, design, decision-making and outcomes

The review of enquiries, reports and declarations on language in education in Africa up to 2005 (e.g. UNESCO, 1953; Organisation of African Unity, 1986; Asmara Declaration, 2000) leads Kathleen Heugh to conclude in Chapter 2 that with regard to language in education there is a consensus about developing African languages further and teaching the international language of wider communication. There is no consensus at the methodological level such as the stage at which the medium of instruction should change from mother tongue to international language of wider communication, whether it is necessary to use the international language of wider communication as medium of instruction or teach it as a subject, whether the mother tongue and the international language of wider communication can be used complementarily as media of instruction throughout the school system, what the role of the national language of wider communication should be, and whether trilingual language models would be recommended. Furthermore, it has become obvious that the terminology in language in education is used differently and often misunderstood (for definitions see the Glossary).

In order to provide evidence-based information to the above-mentioned discussion, Heugh (Chapter 2) analysed research results from a broad range of literacy and language education models used especially in Africa as well as international research on language education and learning (up to 2005 with some updates of findings from subsequent research). The models were analysed for their design features and potential outcomes in order to find out

which provide the best results in the African context where in many countries less than 50 per cent of the pupils finish their primary education. Common to most African countries is the fact that until at the latest year four a mother tongue is used as the medium of instruction which is then replaced by the official language (early-exit model), which in most countries is an international language of wider communication and often a foreign language for most students. Another common feature is that many African countries have a rich experience with a multitude of language in education programme designs.

Heugh's analysis produces three main results, which are further elaborated below:

- 1. The retention of mother tongues as languages of instruction during at least the whole of primary education (at least six years) is advocated over earlyexit models which use mother tongues as languages of instruction for between one to four years, in order to allow learners to develop adequate cognitive, linguistic and academic skills in the mother tongues.
- 2. It is important to know that the effective transfer of cognitive and academic competences from the mother tongue to the second language is possible only when the learners have acquired adequate linguistic and academic competence in their mother tongues. Studies show that it requires at least six years for the effective transfer to take place.
- 3. In addition, the transfer of cognitive and academic competence between mother tongues and second language takes place under specific conditions which include adequate instruction in the mother tongues as languages of instruction, effective teaching of the second language as subject matter, well-trained teachers, availability of quality educational materials in both mother tongues and a second language and overall well-resourced learning environments.

African and international research in education, language acquisition, psycholinguistics and applied linguistics (see for example: Malherbe, 1943; Bamgbose, 1984a, 2000a; 2004a, b; Fafunwa, 1990; Macdonald, 1990; Ramirez *et al.*, 1991; Hartshorne, 1992; Dutcher and Tucker, 1995; ADEA, 1996, 1997; Garcia and Baker, 1996; Elugbe, 1996; Thomas and Collier, 1997, 2002, 2004; Küper, 1998; Baker, 2002; Heugh, 2002, 2003) come to the same following conclusions (quoted from Chapter 2) with regard to effective language education:

- The first language needs to be reinforced and developed for 12 years in order for successful second language learning and academic success to take place, i.e. from birth to 12 years (first language as medium of instruction for at least six years of formal schooling).
- The international Second Language Acquisition literature indicates that under optimal conditions (these do not apply in most education systems in Africa) it takes six to eight years to learn a second language in school sufficiently well enough to use it as a medium of instruction.
- Language education models which remove the first language as a primary medium of instruction before year/grade five will facilitate little success for the majority of learners.
- Language education models which retain the first language as a primary medium of instruction for six years can succeed under very well-resourced conditions in African settings. Eight years of mother-tongue education may be enough under less well-resourced conditions which are the reality in many African schools.

The choice of the medium of instruction thus has a long-term effect on the performance of pupils throughout the school system. Heugh extrapolated a pattern of expected scores in the second language by years/grades 10/12 in *well-resourced* schools (see below) by comparing the available African research and longitudinal, large-scale and other international studies (Macdonald, 1990; Ramirez et al., 1991; Thomas and Collier, 1997, 2002; ADEA, 2001; Heugh, 2002; Halaoui, 2003; Sampa, 2003; DoE, 2005; Mothibele, 2005). In the first three to four years, students progress quite well in all programme designs. However, after year/grade four the academic challenges increase across the curriculum. Longitudinal studies (Ramirez et al., 1991; Thomas and Collier, 1997, 2002) provided evidence that pupils who study in a second language from early on start losing ground in year/grade five when compared to first language learners and will not catch up later on (see also for Africa: Alidou and Brock-Utne in this volume; Halaoui, 2003; De Jong, 2004; DoE, 2005). Thus, the various language-in-education models provide different kinds of opportunities. The following ranges of mean achievement scores can be expected from the different language-in-education models (see Table 2.4, Chapter 2):

- subtractive model: 20-30 per cent;
- early-exit transitional models: 30-40 per cent;
- medium-exit transitional 40: per cent;
- late-exit and very late-exit transitional model: 50-55 per cent;
- additive model: 60 per cent.

To understand these differences, we must first understand the link between literacy and language development and the conditions for transferring competences from one language to another. The challenges and complexities that learners deal with in academic learning are often underestimated. It takes, for example, a big cognitive leap from simple decoding of predictable storylines and familiar concepts in the first three to four school years to understand texts with unfamiliar concepts and unexpected outcomes from year five onwards. If this cognitive leap coincides with a change to a rather unfamiliar medium of instruction, children's language competences are insufficient to meet the high-level cognitive demands of the educational purposes in all subjects and especially in significantly decontextualised subjects such as mathematics and science.

Available research in Africa (up to 2005 with some update of findings from subsequent research) suggests, according to Heugh, three ways in which pupils can learn an additional language successfully and succeed in other subjects (Extract from Chapter 2):

- *Mother-tongue-medium education throughout,* where learners have the mother-tongue as a medium of instruction throughout and good provision of the additional language taught by expert teachers (mother tongue speakers of Afrikaans in South Africa have become highly proficient in English, where English is taught only as a subject for one lesson per day).
- Additive bilingual education, where there is mother-tongue medium for at least six to eight years, during which there is also good provision of the additional language taught by expert teachers, followed by dual-medium education (some subjects in the mother-tongue medium; some subjects in the additional language/second language in years/grades 8-12).

Very late-exit transition to second language: Earlier experiences in South Africa show that the transition to English in the ninth year (a late-exit to English) can be successful if students have eight years of mother-tongue education with competent teaching of a second language during this time. Students who went through this process between 1955 and 1976 achieved high success rates in English language achievement and in other areas of the curriculum.

To conclude, African governments are recommended to build on the existing provision of teaching in African languages and expand it so that additive bi/trilingual education becomes a common feature of education and development. While African languages should be used as primary medium of instruction to at least end of year six (preferably year eight and ideally to the end of secondary education), the teaching of the international language of wider communication needs to be improved and used as a supportive medium of instruction in secondary school. A third language of national or regional significance should be included in the education system. A communication strategy needs to be developed by each government so that communities and civil society, in general, are informed about the critical role of the choice of languages and engaged in the debate.

This study has also led to several recommendations regarding the evaluation of language and literacy programmes in Africa. In order to avoid technical concepts being confused, and to assess critically the appropriateness and relevance of research, evaluations and programme designs for African multilingual contexts, specialists in language in education need to have an up-to-date and broad knowledge of research in psycholinguistics, sociolinguistics, second and foreign language acquisition in Africa and internationally. Heugh criticises the fact that African countries often rely on studies and the second language industry from the respective former colonial power. However, their second and foreign language research and programmes are designed for immigrants in a different linguistic context or for well-resourced European schools where English, French or Portuguese are taught as a subject and not used as a medium of instruction. These programmes are not tested and designed for the African context. Furthermore, evaluations should track students' performance to year six and need to provide information about the resources (e.g. teacher training, materials, school site) of control schools. Comparing a programme design of a poorly resourced school with a programme design implemented by a well-resourced school makes it difficult to isolate the variables that relate only to the programme design.

Teaching practices – teaching in a familiar language

Hassana Alidou and Birgit Brock-Utne reviewed classroom studies conducted in Benin, Burkina Faso, Botswana, Ethiopia, Ghana, Guinea-Bissau, Mali, Mozambique, Niger, South Africa, Togo, and Tanzania. In their search for studies they observed that the availability of "qualitative and quantitative studies on teaching in both national and official languages at all levels of instruction in Africa" is limited. In order to assess the impact of innovation, studies in classrooms, schools and communities should be promoted. Teachers and their supervisors could contribute to more knowledge about teaching practices if their training were to include formative and summative assessment and evaluation components on mother-tongue and bilingual education. Alidou and Brock-Utne agree with Traoré (2002) that teacher supervisors whose role is to support and evaluate teachers should have training in multilingual education and pedagogy, as well as the appropriate assessment and evaluation methods used in bilingual and intercultural education.

Several studies provided evidence that when the medium of instruction was a foreign language for students and in which even the teachers were often not proficient, classroom interaction became teacher-centred and student performance was low (e.g. Williams and Mchazime, 1999; Mwinsheikhe, 2002; Bergmann et al., 2002; Rubagumya, 2003, Brock-Utne 2005c). When students were not familiar enough with the medium of instruction, teachers reverted to switching between the official medium of instruction and the language that most students are familiar with, to increase their understanding of the subject matter and encourage participation in classroom activities (e.g. Mwinsheikhe, 2002). Furthermore, teachers adapted teaching practices to the low language competences of the students by reverting to repetition and memorisation and leaving aside effective questioning (e.g. Rubagumya, 2003). Low performance and participation are demotivating for teachers. Unfortunately, teachers use coercive measures such as shaming, ridiculing and beating – either in frustration or because they believe that their students are lazy. Research has shown that fear prevents learning and participation and leads to school disaffection (Smith, 2003). The examples of these teaching practices are a mirror of the inappropriateness of programme design and teacher training.

Effective teaching practices, active participation of students and better learning outcomes were observed in classes where a familiar language in which students and teachers are proficient was used (Alidou, 1997; Ministry of Education of Ethiopia, 2001; Ouedraogo, 2002; Bergmann *et al.*, 2002; Sampa, 2003; Mekonnen, 2005; Brock-Utne 2005c; see also Chapter 4). Students also performed significantly better in learning foreign languages such as English or French. Bi- or multilingual education programmes that use mother tongues or national languages of wider communication as medium of instruction are, for example, the *Écoles Bilingues* in Burkina Faso, the *Écoles de la Pédagogie Convergente* in Mali and the Zambian Primary Reading Program (Traoré, 2001; Woolman, 2001; Bergmann *et al.*, 2002; GTZ, 2003; Ouédraogo, 2002; Ilboudo, 2003; Sampa *et al.*, 2003; Dembélé and Miaro-II, 2004; World Bank, 2005). In the case of the *Écoles Bilingues* the pupils were ready to take the primary leaving exams after only five years (instead of the usual six years) and they performed better than students who studied for six years in the monolingual schools which used French as medium of instruction (Ouedraogo, 2002). In the Malian case the national languages are used in years five and six for 50 per cent of the teaching time (Chekaraou, 2004) and in the case of Burkina for 10 per cent in year five.

Effective teaching practices are a result of teacher training in all languages of instruction and child-centred teaching practices in order to diversify and stimulate the learning processes (Traoré, 2001; Benson, 2002; Alidou, 2003; Chekaraou, 2004). In the case of the *Écoles Bilingues* teachers are regularly trained by the University of Ouagadougou in the use of first and second languages as medium of instruction, which has led to students' positive performance. University linguists train the teachers bilingually in both national languages and French in a method based on adult literacy education.

Literacy is one of the main characteristics of academic learning. With regard to literacy, teacher training needs to improve in all types of schools so that students develop adequate literacy skills, which is often not the case even at the end of primary education. The Zambian Primary Reading Programme demonstrated effective literacy teaching practices; the Zambian Breakthrough to Literacy programme (Sampa, 2003) involved parents; the Ugandan Reading for All Project aimed to instil the joy of reading (Gordon, 2005); and InWEnt promoted an integrated language teaching approach used in Burkina Faso, Ghana, Mali and Niger (GTZ, 2003; Galdames *et al.*, 2004).

Reading and writing are cognitively highly challenging tasks. It is often underestimated how important it is to practise reading and writing skills out of school and that it is primarily these practices which motivate learners to become literate. Therefore, the literate environment is a very important part of the learning environment (Alidou and Jung, 2002; Glanz, 2004). Hence, reading cultures in multilingual literate environments were supported by organisations such as GTZ and InWEnt with training for authors and support for local and regional publishing companies.

Teachers in all types of schools are affected by a weak literate environment in terms of lack of educational material (teachers' guides, textbooks and reference books in the respective languages of instruction). It creates a serious information gap because teachers with little training are especially reliant on such guides.

It is not yet self-evident that teacher training programmes and deployment need to be congruent with the languages of instruction so that teachers develop and have the required language competences (for the Malawian experience see Chilora, 2000; Kaphesi, 2003). Teachers in Ethiopia, for example, are instructed in English only for years five to eight, although several mother tongues are used as languages of instruction (Mekonnen, 2005). Teacher deployment needs to consider the oral and literacy language competences in the languages of instruction (Dzinyela, 2001).

Furthermore, teacher training needs to help teachers to be confident with childcentred pedagogy. Child-centred pedagogy includes relevant curricula based on a philosophy that relates education to the learners and their communities. An innovative feature of the *Écoles Bilingues* was the integration of sociocultural and economic activities in the curriculum. Teachers were trained in guiding students to develop positive cultural values and economic skills which parents greatly appreciated.

In the light of research results, Alidou and Brock-Utne recommend the revision of the curriculum for teacher training programmes. Multilingual and intercultural initial and in-service teacher and supervisor programmes need to be developed which support the integration of multilingual and intercultural education philosophies, theories and methodologies. These programmes should include, for example, first- and second-language acquisition, teaching theories and methodologies.

Active students – learning through a language they master

Brock-Utne's and Alidou's comparative study of pupil performance in schools using familiar and unfamiliar languages of instruction reconfirms that pupils are more active and learn better in mother-tongue-medium schools (e.g. Bamgbose, 1984b; Fafunwa *et al.*, 1989; Prophet and Dow, 1994; Brock-Utne, 1995, 2000; Djinzela, 2001; Bergman *et al.*; 2002; Mwinsheikhe, 2002; Alidou and Maman, 2003; Chekaraou, 2004; Bamgbose, 2005; Brock-Utne 2005c, see example of biology classes in Chapter 4). Their performance was furthermore positively influenced by learner-centred teaching methods (e.g. Traoré, 2001; Fredua-Kwarteng and Ahia, 2005a; Brock-Utne 2005c) and a curriculum that builds on prior learning and relates to the learners' surroundings (e.g. Afolayan, 1976).

Studies on the learning of scientific and mathematical concepts found that students taught in an African language understood the concepts significantly better than students who were taught in English or French. The researchers expect that learning problem-solving and problem-posing skills would impact positively on the learning process if facilitated by the use of familiar African languages (e.g. Prophet and Dow, 1994; Mwinsheikhe, 2002; Fredua-Kwarteng and Ahia, 2004; Brock-Utne 2005c).

Curricula which are linguistically and culturally sensitive contribute effectively to the socio-cultural and economic development of the learners' communities. Students will develop a deeper understanding of their environment and cultures and be more self-confident (Châtry-Komarek, 2003; Chekaraou, 2004). Countries such as Burkina Faso, Mali, Namibia and Niger have experimented successfully with multicultural curricula promoting indigenous knowledge, how to live respectfully together in a multicultural society, practical activities in connection with the local economy and gender equity (e.g. Brock-Utne, 1995, 2000; Ouédraogo, 2002; Pfaffe, 2002; Ilboudo, 2003). Such curricula also achieved the involvement of parents (e.g. Fafunwa *et al.*, 1989). Therefore, culturally-sensitive curricula (including assessment) in African languages that reflect the culture, surroundings and heritage of the child should be developed.

The language used in examinations has a great impact on students' performance in exams. Several studies proved (e.g. Kalole, 2004; Makelela, 2005) that in all subject matters students' scores reflect their proficiency in the language used in the exam and that difficulties with, for example, English have a negative effect on results. Wilmot (2003b) tested students who gave average performance with mathematics exams in English. Using the same exam but asking them to answer in the mother tongue, he found that students' level of knowledge was better than in the test conducted in English. Students whose language competences do not correspond to their knowledge in the subject matter are thus disadvantaged, a fact that will also continue to be reflected in international comparative studies such as TIMSS (Trends in International Mathematics and Science Study) (Fredua-Kwarteng and Ahia, 2004).

Tests and examinations decide the orientation of the curriculum, further advancement in the system and the focus of students' learning. The evaluation of learning needs to serve the vision of education and not *vice versa*. If this vision includes practical skills, multilingual language competences and social competences in addition to the usual cognitive skills, then these need to be tested and examined. There is, however, a tendency to prefer foreign examinations such as the Cambridge Examination Syndicate's instead of locally-designed examinations (Little, 1992; Takala, 1995). The research results of this study question whether this will be to the benefit of Africa. ADEA's Working Group on School Examinations built a successful technical assistance programme to support African countries in building country-specific examination systems (Lynch, 1994). Namibia benefited from monitoring its countrywide examinations for cultural and gender bias (MEC/NIED, 1994). Brock-Utne and Alidou recommend monitoring exams for their cultural content. Children should be allowed to answer exam questions in the language in which they feel most comfortable.

The effectiveness of mother-tongue-medium bilingual education in Africa has been proved. Brock-Utne and Alidou recommend accompanying reform processes with pilot studies on learning in schools which use a familiar African language as language of instruction beyond the third year in primary school. The easiest start would be with schools where a familiar African language is already being used as language of instruction in the first three years of schooling. Additionally, encouraged by the results of studies in secondary schools, more pilot studies on learning in schools which use a familiar African language as language of instruction are recommended. Such studies could start in countries where a familiar African language is already being used as medium of instruction throughout primary school.

Use of African languages for literacy: Conditions, factors and processes in Benin, Burkina Faso, Cameroon, Mali, Tanzania and Zambia

The promotion of African languages and literacy through formal and nonformal education has been continuously debated since the 1960s between experts and policy-makers in Africa. Since the early 1960s significant progress has been made, considering that in countries such as Mali, Niger and Burkina Faso less than five per cent of the population had access to education, which to a large extent explained the low literacy rates. The process of the integration of African languages and cultures into education systems which were created during colonisation has not been finalised. Several declarations and action plans resulted from it and have influenced national policies and practice (e.g. OAU, 1976, 1986; ADEA, 1996a,b). Among the various policy proclamations, Alidou emphasises the high quality of the Harare Declaration (1997), which is based on its clarity, comprehensiveness and relevance from local to international level.

As a result of her analysis of six countries' policies and practices (Benin, Burkina Faso, Cameroon, Mali, Tanzania and Zambia; up to 2006) Alidou found that despite their significant progress they have not yet reached an educational level which would significantly have an impact on economic development. Their literacy rates and economic developments are among the lowest in the world (International Bank for Reconstruction and Development/The World Bank, 2003). Poverty, lack of qualified human resources in governmental and non-governmental organisations, lack of investment in literacy and non-formal education, dependence on international aid and the lack of political will to adopt effective language-in-education policies were identified as key factors which prevent the education systems from being effective and the above-mentioned international agreements from being implemented.

In 2005, Tanzania was the only country among the six which had gone beyond experimentation and implemented a policy that promoted the effective use of a national language in formal and non-formal education and administration along with English. Its success can be traced back to Nyerere's concept of "Education for self-reliance" which perceives adult education as the means for laying the foundations in the present for future development (Nyerere, 1968, 1978). A series of policies determined Kiswahili as the national language and official language of administration (1962 and 1967), promoted Kiswahili as sole medium of instruction (1967, 1968), abandoned the Cambridge School Certificate Examination (1970s) and supported it as a means of cultural expression (1997). Several governmental and non-governmental institutions for research, culture, training of trainers and publishing were created to carry out these decisions. Alidou points out that as most countries have today adopted a democratic political system, Nyerere's one-party regime's strategy to impose one language in a multilingual country without a social negotiation process would not be viable. However, what can be learned from it is that African languages have the same potential as any other language, and can be taken to the desired level if the political will is there to create the necessary policies and strategies.

In order to promote African languages and literacy, all countries established departments to promote literacy in national languages. Cameroon and Mali undertook legal reforms to provide a better framework in favour of national languages. Burkina Faso (Ilboudo, 2003), Mali (Diarra, 2005) and Zambia (Sampa, 2005) promoted educational innovations with a bi- or multilingual approach. Alidou points out that without an effective language policy it is not possible to promote a reading and writing culture inside and outside school. An effective language policy takes care that the languages taught in education reflect everyday communication patterns. It would be demotivating for learners to learn how to read and write in languages that are neither promoted nor used as written languages.

The non-formal education sector plays a significant role in many countries in the development of African languages and literacy. Its strength lies in its flexibility which gives space to the development of innovative approaches that meet the diverse demands of of-out-school children, youth and adults (e.g. *Écoles Bilinques* in Burkina Faso). Needs assessments and ethnographic studies provided information on learners' demands and conception of literacy (Alidou, 2005; Papen, 2005). Through experimentation new insights into quality education in Africa could be gained. Several evaluation studies (World Bank, 2001; Coulibaly, 2003, see also Chapters 2, 3 and 4) have confirmed the effectiveness of demand-driven approaches practised in the non-formal education sector. Education centres such as Tin Tua in Burkina Faso and the Education Centres for Development in Mali have developed successful approaches for literacy learning that respond to diverse learning needs. The integration of African languages and bilingual education models were integral features. Students in bilingual programmes such as Tin Tua and the Écoles Bilingues in Burkina Faso had excellent results in national primary education examinations and moved on to secondary or vocational education. These programmes are good examples of the benefits of a flexible and demand-orientated education system. They built bridges

between non-formal and formal education. Such innovative programmes were the foundation for educational reforms, for example, the Malian *La Nouvelle École Fondamentale*. Due to their success, several international and bilateral organisations invested in these programmes, such as InWEnt, *Oeuvre Suisse d'Entraide Ouvrière* (OSEO), UNICEF, USAID and the World Bank. Alidou therefore underlines the importance of a multilingual demand-driven approach that recognises prior knowledge and considers the literacy and educational needs of children and adults as important quality criteria. Literacy and education needs refer also to the use of ICTs such as computers, cellular phones and radio which are used today in local, national and international communication and in distance education (Afrik, 1995). The non-formal education sector is a critical sub-sector which provides highly-relevant services in African countries and should therefore be adequately funded.

Countries such as Zambia mobilised the formal and non-formal sectors to address the low literacy rates. Evaluations of successful literacy programmes such as the Zambian Primary Reading Programme and needs assessments concluded that appropriate language and literacy policies matter greatly in order to meet society's learning needs (Mwansa, 2003; Sampa, 2003). Zambia may achieve a 94.2 per cent literacy rate by 2015 (Aitchison and Rule, 2005). Nevertheless efforts needed to be made to address disparities between rural and urban areas and to teach adolescents and young adults aged 14 to 20 years because their economic involvement is crucial and their literacy rate lower than adults aged 21 to 45 years.

Strategies that promote multilingual writing and reading cultures engage people in reading and writing in various languages. A stimulating literate environment provides a broad variety of reading materials to cover the needs of different age groups and different interest groups. Writers' awards such as the *Grand Prix National des Arts et des Lettres* in Burkina Faso (Sanou, 1994) provide incentives to writers and give prestige to reading and producing literature. Engaging learners in writing their stories and producing texts provides opportunities for learners to practise and learn how to compose texts while at the same time addressing the problem of shortage of educational material. Such approaches are effective and practised in the REFLECT approach to literacy or in Malian schools. The production of newspapers in national languages is another strategy which stimulates reading and writing practices. Newspapers written in trans-border languages are read in neighbouring countries as well (e.g. the newspapers in Gulmance by *Tin Tua*). In Mali newspapers are disseminated in rural areas on market days and transported by a literacy caravan. Partnerships have been created in order to involve all stakeholders because the creation of a literate society concerns all societal domains. Alidou observes the positive trend towards the creation of new partnerships such as through the *faire-faire* strategy in Burkina Faso and Benin, Cameroon's National Literacy Programme and successful collaborations with civil society (*Écoles Bilingues*) and universities in developing multilingual programmes (University of Ouagadougou and Yaoundé University). From these experiences it can be derived that the role of national languages needs to be made explicit, funding needs to be also available for small operators, and partnerships must be strengthened in order to integrate literacy and basic education into all development programmes.

Costing and financing mother-tongue-based bilingual education

It is often argued that the implementation of mother-tongue-based bilingual education is too costly because of the number of languages involved. However, analyses by Obanya (1999a and b) and Bamgbose (2000a and b) focusing on available options, successful strategies, related costs and funding strategies have indicated that this argument is based on a fundamental fear of change. In this volume, Kathleen Heugh has taken up this debate once again to explore the costing and funding issues affecting language education programmes and to stimulate further research and action.

Based on the research results presented in the previous Chapters, in Chapter 6 Heugh adopts the premise that formal education should teach African pupils high-level language skills, both in African and in international languages of wider communication. These programmes provide a good return on investment for individuals and the educational, economic and cultural sectors alike. As in other areas explored in this publication, there is, however, a lack of available studies on the costs and benefits of different education programmes. Hence, she argues for the need to provide economists with information on literacy and language development issues in education.

Heugh suggests using Psacharopoulos' (1996) taxonomy to analyse the economics of education and determine the costs of various types of mothertongue and bilingual education and compare these with the costs of monolingual education. The first-level analysis consists of determining (1a) unit costs by schooling level, curriculum type and pedagogical inputs in public and private institutions, and (1b) the private- and public-sector benefits in terms of graduates' learning outcomes and earnings/productivity according to schooling level and curriculum type. The second-level analysis consists of assessing (2a) efficiency, i.e., cost-effectiveness and cost-benefit analyses, and (2b) equity in terms of costs and benefits.

Africa currently achieves low learning outcomes in primary and secondary education. Two thirds of countries with the lowest gross enrolment rate at secondary level (GER2) are in Africa and the proportion of students who acquire a school-leaving certificate at year 12 are even lower (Lewin, 2001a and b). Yet the majority of the population needs higher-level learning in order to achieve socioeconomic development (employability, access to tertiary education, higher income, higher taxes, better health, and so on). The poor performance of current systems compared to the better results generated by good-quality programmes of mother-tongue and bilingual education (see this volume) lead the author to conclude that it would be more costly in the medium and long terms not to reform the current education systems (see also Westcott, 2004).

When comparing costs for different kinds of education models, it is important to use identical measurement criteria and identify the real additional costs clearly. Mother-tongue-medium bilingual education has additional costs; however, given that current systems perform poorly, there is an added need for more investment in quality in order to improve learning outcomes. For example, teachers across the curriculum currently require training to upgrade their skills in language, literacy, subject matter and pedagogy. Their training could be improved by including: language proficiency models for the languages of instruction; introductory courses on first and second language acquisition and language development; courses on teaching reading and writing; information on bi-/multilingual teaching methods and the use of information technologies; basic training in the production/use of classroom materials; classroom-based action research; and intercultural education modules. Similarly, Heugh outlines ways of optimising the training and requirements for trainers of teachers, planners, advisors to authorities and evaluators. She emphasises that other cost factors – such as salaries, which account for a large proportion of the education budget - would remain unchanged regardless of which language model is implemented.

Assessments should also be carried out to evaluate how and where mothertongue-medium education can save costs compared to monolingual education. For example, many teachers currently teach in a language other than their mother tongue and which they do not master sufficiently for them to act as academic role models. This implies that considerable investment is needed in order to improve their language proficiency and improve the overall quality of education. In mother-tongue-medium education, teachers tend to teach in a language that they master (see also Table 6.3 for an overview of teacher education per language education model). A further advantage of mother-tongue and bilingual education programmes relates to student retention rates: a study in Mali (World Bank, 2005) found that they were 19 per cent cheaper than monolingual programmes due to lower drop-out and repetition rates.

Several cost reduction strategies can be applied to the implementation of mother-tongue-medium bilingual education. The first of these is to map and build on available resources and stakeholder expertise across Africa (Mazrui, 2002). The second is for countries using the same language(s) to collaborate in developing common terminology; this would both reduce costs and increase opportunities for local language and publishing industries. The third is to place a greater focus on developing language and information technologies to suit the African context, e.g. to establish generic terminology databases that can be adjusted to suit national and additional needs. The fourth and final strategy is to compare and evaluate programmes after a minimum of five to six years, once academic learning outcomes can be identified and assessed more accurately (see also Chapter 2).

To generate a more realistic picture of the costs that each education model entails in the medium and long term, Heugh recommends assessing the budgetary implications of each (i.e. initial, recurrent costs, cost recovery strategy and return on investment) over a five to ten-year period. She also suggests a similar time span to assess the benefits and recovery of costs for each model. She proposes a ten-point plan to assess the various criteria, areas and resources involved in mother-tongue-medium and bilingual education programmes, which she argues would provide effective costing guidelines (see Heugh, Table 6.5.3). These are as follows: (1) language education policies; (2) implementation plans; (3) public support; (4) language technology (terminology); (5) translation technology; (6) language development units; (7) multilingual dictionaries; (8) multilingual materials; (9) teacher training and (10) total investment and additional education budget expenditure over a five-year period. The initial investment should be covered by national and international resources, whereby civil society contributes towards national resources. Overall, this investment is seen as worthwhile in view of the higher benefits (Grin, 2005) for the quality of education and the usage outside school of knowledge and skills obtained in school and vice versa.

Optimising publishing for mother-tongue-medium bilingual education

Good-quality educational and complementary reading materials in national as well as official languages are indispensable for students and teachers of mothertongue-medium bilingual education and the development of multilingual reading and writing cultures (Diallo, 1999; Fagerberg-Diallo, 2001; Alidou, 2004). This volume features the work of two publishers specialising in educational and other reading materials: Yaya Satina Diallo from Éditions Ganndal, Guinea and Peter Reiner from Gamsberg Macmillan, Namibia, both of whom advocate strongly for locally-based multilingual publishing. They highlight its benefits and point to successful strategies and remaining challenges. They also recommend ways of improving the publishing sector, while placing a special emphasis on African languages.

Publishing is an economic enterprise. In many countries, the textbook market accounts for 95 per cent of the book market. Hence, education and language policies determine the demand for educational materials in African languages. Backed by its constitution and language policy, Namibia's education policy promotes African languages in the school system as languages of instruction or subjects until year 12 and offers them as subjects at university. These policies have created a significant market for publishing companies producing educational and other reading materials in all the languages used in education. In 2005, Gamsberg Macmillan's backlist comprised 1,300 titles, 60 per cent of which were published in African languages. Diallo observes that the renewed commitment to mother-tongue-medium Education for All in countries such as Burkina Faso, Kenya, Mali, Mozambique, Nigeria, and Senegal has had an immediate and positive impact on publishing, generating demand for educational materials in African languages. He pointed out that learners in literacy programmes enjoy reading books which go beyond the reading materials used in the classroom and extension literature. Such materials, including literature and comics, are necessary for people to become fluent readers.

Even though the markets for many African languages are small, publishers have found ways of promoting them. Successful strategies have included (i) applying the principle of cross-subsidisation, whereby profits from more lucrative fields of the business are invested in less profitable fields, (ii) increasing the print run slightly so that the unit costs are lower and materials are more affordable and (iii) keeping books in stock until they are sold at the normal price.

Diallo, Reiner and a number of studies concur that the publishing sector in Africa continues to face a number of considerable challenges (Askerud, 1998; Makotsi *et al.*, 2002; Sow, 2003a and b; APNET/InWEnt, 2004; Diallo, 2004). Each level and stage of the industry and book chain have to deal with linguistic and educational issues, ambiguous and conflicting book and copyright policies, weak collaboration among all stakeholders, a poor distribution infrastructure, a lack of professionals (writers, editors, proofreaders, publishers), discontinuity with regard to local book production, high taxes on resources for publishing, a lack of language development and harmonised orthographies, prejudice against literary production in African languages, low purchasing power, high illiteracy rates and a lack of reading habits among the population.

Despite these challenges, publishers underline the need for and benefits of a sustainable local multilingual publishing industry and provide responses to address them. The publishing industry is crucial to education and to the cultural and economic sectors. It represents a job market for people with specialised skills for whom good professional training programmes have been designed and provided, e.g. by InWEnt, ADEA, *Organisation Internationale de la Francophonie* (OIF) and UNESCO. On-the-job peer learning has also proven successful: at companies like Gamsberg Macmillan, writers learn from editors and other authors, while junior editors learn from senior editors. Training on the use of new technologies such as computer-assisted publishing and printon-demand is provided and, if implemented widely, could potentially improve quality control and cut production costs. Universities could contribute further by developing low-cost African language software or free shareware.

A local publishing industry contributes to economic growth because taxes are paid locally, costs for books decrease, jobs are created and dependence on imported textbooks and external funding is reduced. For a strong and sustainable publishing industry to develop, Reiner advocates a free market system and a competitive approach. In Namibia, this has generated a diversified publishing industry; the wealth of local textbook publishers has pushed them to compete with one another in terms of quality and price. Several publishers can have their textbooks approved and thereby secure their share of the lucrative textbook market, while teachers have a wide range of textbooks to choose from. A further diversification strategy employed in Namibia has been to encourage writers and publishers to produce new titles aimed at secondary schools every two to three years.

For a sustainable local publishing industry to flourish, it needs to have access to financial resources and tax breaks. It is also crucial to seek appropriate sources of funding: while seemingly a tempting prospect, donor aid can destroy an emergent local industry overnight. Collaborations with donors should always strive to stimulate local industry and bridge existing gaps, with a good example being Namibia's GTZ-sponsored Upgrading African Languages Project.

An emergent industry requires stability, continuity and certainty. It is dependent on political support, an adequate budget, close communication and consultation with the government, unambiguous language, education, copyright and book policies, and the full cooperation of all stakeholders involved. Established partnerships and an effective distribution infrastructure enable individual publishers to develop their own networks, thereby saving costs and making published materials more accessible to consumers. Harmonised systems of spelling also help to reassure publishers that their product will not become outdated and encourage them to invest in the production of new materials.

Provided that these conditions are met, the publishing industry – like all consumer-oriented markets – can create a long-term market for its products and contribute towards the development of a literate environment. Publishers can also stimulate a writing culture in African and other languages by offering book prizes. In Namibia, this strategy has proven exceptionally successful as a means of discovering local authors and encouraging the submission of unsolicited manuscripts in a range of languages – and a selection of good-quality, African-language literature both raises the profile of these languages and makes reading and writing more attractive to a larger proportion of the population. Using African languages to cover as broad a range of thematic fields as possible ensures that terminologies in these languages are constantly being created, coordinated and maintained at the same level as those being used in the wider context of dominant-language media and education. Dictionaries fulfil an important function in this regard.

In order to increase readership markets for African languages, benefit from joint market research and increase opportunities to apply economies of scale, attempts

have been made to build on crossborder languages (for example Pulaar, Malinke, Hausa). Attention has increasingly been focused on harmonising orthographies, and related collaborations have been carried out, with one example being the *Projet Madingue/Peul* (MAPE, Mandinguo-Fulfulde Promotion Project 1981-1988). Nevertheless, transnational trade is still in its infancy and hampered by bureaucracy, slow and unreliable delivery mechanisms and the complex procedures governing imports and payments. Diallo proposes the development of an integrated editorial policy for publishing in transnational languages. In addition, he suggests increasing the number of translations from African to other languages (and vice versa) in order to diversify and share cultural products across linguistic barriers.

Provided that the respective education sector ensures that appropriate language and publication policies are in place, "publishing in African languages is not only possible, but can be conducted as a viable, profitable and sustainable commercial activity [...] contributing to the development and improvement of the social and intellectual capacities of the continent as a whole" (Reiner, Chapter 8, p. 337).

Chapter 1

Background and history – language politics and planning in Africa

Ekkehard Wolff

This chapter provides background for the present study by presenting a very general outline of some of the major problems and prospects of language politics and planning in Africa. It deals with the effects of the language issues on sustained development and poverty alleviation, with special reference to language-in-education policies.

The following account is based on the conviction that political stability, peace, poverty reduction, economic development, and fully functional institutions require the recognition of linguistic and cultural plurality as indispensable resources. These rely largely on indigenous solutions to social problems in terms of local action based on local resources. Interventionist strategies alone do not influence or shape productivity, economic growth and societal change. African governments are still facing the challenges posed by the *Jomtien Declaration* of the World Conference for Education (1990), the targets of the World Summit for Social Development (1995), and the Dakar Framework for Action, adopted at the World Education Forum (2000). A major stepping stone towards the second of the eight Millennium Development Goals, is Universal Primary Education for all children everywhere by 2015, in the framework of Education for All, in which the "language factor" must be given due recognition. The strengths of the new sector-wide approach must be duly exploited in terms of comprehensive plans and strategies, decentralisation, stakeholder consultation, monitoring, and fund allocation.

The urgency of the task becomes apparent from a few observations and figures that characterise present education trends in Africa (World Bank, 2001: 1; The Millennium Development Goals Report, 2008: 13):

- The education development record in Africa since 1988 has been disappointing. Several countries including Botswana, Cape Verde, Mauritius, Namibia, Seychelles, Swaziland, and Zimbabwe sustained progress in the 1980s and 1990s. Others have initiated promising long-term programmes of reform and development. However, the reality for too many Africans is an education system characterised by low quality and limited access.
- For the region as a whole, progress has largely stalled since 1990, failing to reverse the setbacks of the 1980s. Every school level has too few education facilities, and those that exist are often in poor repair and inadequately equipped.
- Africa has the lowest enrolment rate at every school level (i.e. primary, intermediate, secondary), and it is the only region where the numbers of children not in school are continuing to rise. The average African adult has fewer than three years of schooling, lower than the attainment for any other region. There are also growing education inequalities within Africa between income groups and between urban and rural populations.
- Education trends have a direct bearing on poverty reduction efforts in sub-Saharan Africa. Africa's share of global poverty since 1987 has risen, and a growing proportion of Africans cannot meet their basic needs.
- Without a quantum leap in education at the national level, Africa will miss the 2015 target of universal primary education. The *Millennium Development Goals Report* (2008: 13) states, "in sub-Saharan Africa the net enrolment ratio has only recently reached 71 per cent, even after a significant jump in enrolment that began in 2000. Around 38 million children of primary school age in this region are still out of school", suggesting the target will be missed by a large margin.
- Failing to extend the benefits of education development to the poor is thus likely to prove highly costly – economically, socially, and politically. Accelerating education development in Africa therefore needs to be part of broader poverty reduction and rural development strategies.

The language factor in education and development discourse

African governments, together with organisations and devoted individuals, have made remarkable efforts and have channeled considerable resources into the national educational systems on the continent in order to comply with the goals of the 1990 Jomtien World Conference for Education that were scheduled to be reached by the year 2000 and subsequently reaffirmed in the goals of the Education for All (EFA) initiative to be reached by the year 2015. In the light of apparent failure to reach the Jomtien goal, quite obviously, the actions were insufficient both in reforming the education system and in educational practice, presumably not only since 1990 but for a much longer period. African governments, therefore, would be well advised to stand back and critically review their educational policies, no matter whether they have largely retained the educational system inherited from colonial times (as has largely been the case in the so-called francophone and lusophone countries) or whether they have attempted to change it since independence (as has happened in some of the so-called anglophone countries).

Evidence suggests that one of the major factors responsible for the failure is the "language factor", whose role not only in the classroom but also, and primarily so, in society as a whole is to be described and analysed in this document. The analysis leads to evidenced-based objective recommendations for African governments and other stakeholders regarding the way forward.

Briefly, educational practices in Africa have failed independently of the two most commonly used language-in-education models (for details see Chapters 2-5 of this volume). Where educational systems have been retained that are based on the usage of the language of the former colonial master as the sole medium of instruction, the rule is rather poor performance of the system as a whole. This is largely the situation in the so-called francophone and lusophone countries of Africa. This, however, does not come as a surprise to language-in-education experts, who have always maintained that learning in a foreign or unfamiliar language simply cannot work for most learners. Even where considerable efforts were made by governments to introduce or maintain mother-tongue education during the first few years of primary education, these have often not shown the expected results: Again, we observe rather poor performance of the system, such as is the case in much of so-called anglophone Africa. This may in fact come as a counter-intuitive surprise to non-expert observers, who have been told by experts that the use of the mother tongue/local language in lower primary plus transition to the official/foreign language (L2) under a socalled early-exit model would remarkably enhance educational success. Recent scientific evidence-based research, however, shows that "early-exit models" are likely to fail in the long run due to the overly restricted period of learning in the first language.

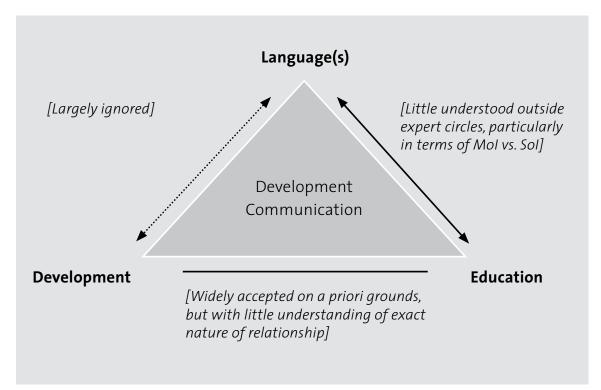
Across the continent and irrespective of the particular colonial past of a country, it is evident that performance is poor. This is so regarding practically all major demands on the educational system such as low school intake, uneven distribution of girls and boys in schools, poor standards of teaching, low motivation of teachers and pupils, high drop-out rates, excessive numbers of class repeaters, poor results at final examinations and low transfer from primary to secondary (and from secondary to tertiary) education. Moreover, many primary school leavers remain practically illiterate and have no or rather minimal competence in the official language. Combined with the poor levels of academic qualifications, school leavers frequently have not received the vocational qualifications necessary for employment in skilled trades or lesser-skilled occupations.

Apart from widespread underperformance of the educational systems, there is yet another set of reasons that affects progress detrimentally in the educational sector in Africa since independence, namely the fact that the "language factor" is practically totally absent from mainstream development discourse. This is true with regard to discourse on, for instance, such central issues as poverty alleviation and sustained development for Africa. This discourse tends to be monopolised by experts from economics and related social science disciplines, who - as a rule – have little or no understanding of the role that the "language factor" has for successful development communication. It is, or has been, also true for major philosophical and strategic documents that focus on the continent's future, such as key documents relating to NEPAD, the African Renaissance, and even regarding *Education for All*. The salient issues addressed in this study, namely the eminent role of the indigenous African languages for quality education as part of additive bi- or trilingual systems, receive marginal treatment at the most - as a rule, the language education issues are not addressed at all. If language is mentioned as an issue at all, reference is usually only to the official languages of non-African origin that were inherited from the colonial past, such as English, French, and Portuguese.

The present chapter sets out to identify some of the fundamental reasons, why and how various deficits in language and development planning and implementation in Africa "conspire" to impede advances and serious progress

of development in general, and of education in particular. Clearly, the focus is on the "language factor". The approach is based on the following simplified model that illustrates the interrelationship between language(s), education and development. At the same time, it shows the different degrees of our understanding of the respective interrelationship: that is that language is largely ignored in the development realm, little understood in the realm of education (outside of expert circles) and, although education is accepted as necessary for development, there is minimal understanding of the exact nature of the relationship.





Given the multilingual settings in which most African societies function, development communication in Africa requires multilingual strategies for the following simple reasons:

- Development strategies require clear and cogent communication in Africa, this involves stakeholders with different language backgrounds.
- Communication is predominantly through language, be it oral or written, be it in a foreign/official language or through indigenous/local languages.

• Communication is facilitated by shared language competence and language repertoires; it is extremely important for development that communication most of all between local people and advisors/consultants occurs through the languages most understood by the local peoples.

This chapter provides some background for a better understanding of language policy discourse in and on Africa, with particular emphasis on language-in-education policies. Education is understood to encompass both formal education systems and practices in non-formal education¹, including aspects of literacy and post-literacy in both indigenous African mother tongues/national languages and non-indigenous official/foreign languages as used in national communication² and/or in the educational system. The central message of the chapter, therefore, is the following:

- 1. Present and continuing underdevelopment in Africa is intimately linked to the language factor, which plays a decisive role in the success or failure of development communication, which again is closely linked to education, more specifically to the language factor in education.
- 2. Evidence-based reviews and analyses of the background and history of language politics and language planning in Africa, particularly language planning for education, lead to advocating comprehensive social planning. This must be based on politics of language that reflect the multilingual and multicultural heritage of the people planned for, and that must be guided by clear visions for a free and democratic society.
- 3. These visions must view education as a societal project that aims to sustain economic and socio-political development framed in a broader context of social engineering that is facilitated by socio-culturally adequate language and education policies and practices.

¹ See chapters by Heugh, Alidou and Brock-Utne in this volume.

² See chapters by Diallo and Reiner in this volume.

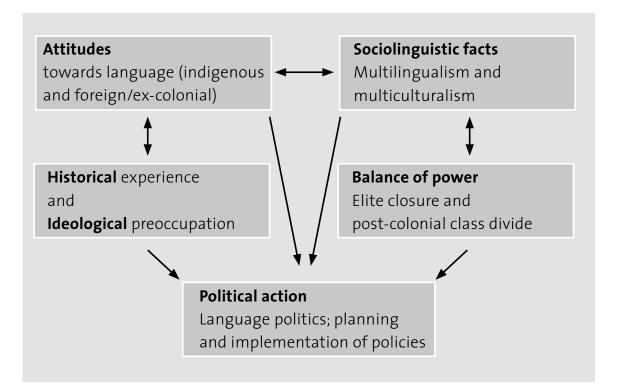
The complexity of the language question in Africa

"Language planning in Africa has to take place against the background of several factors, including multilingualism, the colonial legacy, the role of education as an agent of social change, high incidence of illiteracy, and concerns for communication, national integration and development" (Bamgbose, 2000a: 99).

The formulation and implementation of adequate politics of language in general and language-in-education policies in particular is heavily impeded by the complex interplay of various factors that will be outlined below. This "conspiracy" of factors is largely responsible for what has been termed the "status quo maintenance syndrome" with an overall effect of persisting mediocrity through blocking the developmental capacity of African people (Alexander, 1999). This status quo maintenance syndrome, however, benefits both the national elites and their expatriate counterparts to the detriment of the continuously "undereducated masses". Figure 1.2 graphically represents the complexity of issues that have impact on language politics and planning.

Figure 1.2

Factors contributing to complexity of the language question in Africa and the "status quo maintenance syndrome"



The central question for this report to answer is how to provide quality education to African children (and adults) through best-suited media and curricular content management under a vision for sustained development and poverty alleviation on the continent. In order to find answers, we must address some deeply interwoven aspects of the highly complex communication landscape and patterns of language use in African countries, each with their particular socio-cultural fabric. Aspects to be considered are, among others:

- the sensitivity of the "language question" in Africa given the particular post-colonial setting of all discourse regarding policy matters and the continuing impact of uninformed attitudes in the form of negative prejudice, stereotype, and cliché that detrimentally affect the status and prestige of the African languages and that are shared by many of the stakeholders;
- 2. the plurality of languages and multilingualism as natural assets of individuals and polities in Africa. Why is it so hard for many people to accept African languages as viable resources on both personal and societal levels?
- 3. the role of language(s) in and for development. In other words, what African languages have to do not only with "soft" notions such as African Identity, African Personality, and the African Renaissance, for instance, but also with hard-core economic, social and political development and poverty alleviation strategies. Why and how this must be based on affirmative managing of the received linguistic and cultural diversity in order to achieve, in the long run, national unity and social equality out of inherited social inequality and national disunity?
- 4. the role of African languages as indispensable media of instruction for providing quality education in Africa, together with the adequate introduction of "intercontinental languages of wider communication" (international languages of wider communication, like English, French, Portuguese, and Spanish, but also Arabic) as subject of instruction in "nonexit" language-in-education models – and why so many people, laypersons and even some "experts", get things wrong in Africa;
- 5. the developmental effect of quality education based on advanced language skills. Understanding what the teacher says is not a trivial matter, and African languages have much to do with better learning results not only in mathematics and science, for instance, but also with regard to better

proficiency in English, French, and Portuguese, or any other official language that is – originally – foreign to the country; and

6. the proposal of superior and highly promising concepts for languagein-education policies for Africa – and what it needs to "market" them successfully with some hope of establishing new traditions of comprehensive planning and sustained implementation of dramaticallyneeded educational reforms across the continent.

This chapter, therefore, has several aims. It aims to: (a) establish that any educational policy must consider the normality of multilingualism for most children and adults in Africa; (b) highlight the necessity of making language a central issue in all developmental discourse; and (c) 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. These aims seek to overcome existing intellectual and ideological obstacles towards turning the "language factor" into an asset for sustained development and poverty alleviation.

The sensitivity of the language question in Africa

Language is a highly sensitive issue everywhere in the world. In the African context, the sensitivity is particularly intense due to the continent's colonial past and perpetuated post- or neo-colonial dependencies, which have immediate effects on all politics and educational issues. It is, therefore, not surprising that the expression "language question" is often used as a euphemism for "language conflict".

Language, power and social change

The language question in Africa touches upon self-esteem and feelings of identity and reflects not only past and present political, economic and cultural dependencies, but also relates to fundamental and enduring hard-core governmental politics, internal and external. Language policy is a pawn in the struggle for, or the preservation of, power; and this is by no means a typically African phenomenon (Cummins 2000). The continued use of a dominant originally foreign (ex-colonial) official language after independence created a

post-colonial class divide. This was noticed quite early by the French Africanist Pierre Alexandre (1962, Engl. translation 1974, quoted in Alidou and Jung, 2002) and pointed out lucidly again by the late Kahombo Mateene, who maintained that the colonial and post-colonial education and language policies had divided the African populations into

"[T]wo national groups, a linguistic division which has been based on the fact that one group knows better the colonial language, has got access to an education considered better, whereas the other group in fact the majority, only knows the national African languages, which by government decision, give it no right of access to useful and valuable education, and consequently condemns it to remain always an ignorant class, dominated" (Mateene, 1980, quoted in Alidou and Jung, 2002: 65).

Since education is about opening up options for social change and progress, the political elites of African countries find themselves trapped in a dilemma which, until this day, has made them somewhat reluctant to accept educational reforms that would amount to social change or ruptures with unclear consequences for the balance of power in their polities. A broader approach to language policy must be targeted with the goal of establishing the use of African languages in the primary domains of official government business on the national and provincial or regional levels, i.e. in all legislative, executive and juridical domains. Failing to do this will maintain low status and prestige for the African languages, and subsequently maintain the marginalisation of the majority of the citizens and deprive them of options for social change and a democratic transformation of society.

Language and (post-/neo-) colonial dependencies

In the African context, the language issue is charged with aspects of perpetual (neo-) colonial dependence and intellectual domination. This brings the project of "intellectualisation" of the African languages to the fore, which is viewed as an effective means to "decolonise the mind" (cf. the almost proverbial title of Ngugi Wa Thiong'o's famous book *Decolonising the Mind: The Politics of Language in African Literature* published 1980). A particularly clear case of the use of language as a symbol and tool for maintaining neo-colonial dependency is represented by the various institutions related to the notion of *Francophonie*. Apart from nationalist or even neo-colonialist motivations on the side of former colonial powers, reference must also be made to the role that the World Bank used to play in the past (see Mazrui, 1997; Phillipson, 1997).

"[T]he World Bank's real position ... encourages the consolidation of the imperial languages in Africa ... the World Bank does not seem to regard the linguistic Africanisation of the whole primary education and beyond as an effort that is worth its consideration. Its publication on strategies for stabilising and revitalising universities, for example makes absolutely no mention of the place of language at this tertiary level of African education..." (Mazrui, 1997: 39).

"In essence, the World Bank's proposed educational configuration in Africa demonstrates the continued role of instruction in Euro-languages in creating and maintaining an economy dominated primarily by foreign economic interests and, secondarily, by a small aspiring African bourgeoisie" (Mazrui, 1997: 44).

Note, however, that more recent World Bank documents appear to turn towards a less stringent adverse position, from admitting some value to "local languages" in education (World Bank, 2001), to beginning to fully realise the obvious "Benefits of the Use of First Language Instruction". There are explicit reference to successful bilingual approaches in Burkina Faso, Democratic Republic of Congo, Eritrea, Mali (*Pédagogy Convergente*), and Brazil, Guatemala, Mexico, Haiti, and Papua New Guinea too, for that matter.

"First language instruction results in (i) increased access and equity, (ii) improved learning outcomes, (iii) reduced repetition and dropout rates, (iv) socio-cultural benefits and (v) lower overall costs" (World Bank, 2005: [2]).

This means nothing less than that the World Bank finally appears to accept what enlightened (socio-) linguists, particularly in and for Africa, have been advocating for several decades. This must be considered a major breakthrough.

Language, dominance and control

Another factor working against the generalisation of the use of indigenous languages for education and generally for official communication is the attempt by smaller groups to maintain power and control over larger populations. Already the colonial masters had to learn that in cultures and societies with basically oral communication it is only through spoken language that they could know and find out what the "natives" thought and planned to do. Post-independence language policies in Africa, however, were largely in favour of maintaining or installing the colonial foreign language as official language of the newlyindependent country. This worked much to the benefit of the former colonial masters: all official dealings with the new governments could be conducted in the language of colonialisation. Likewise, the new governments saw no other way of smoothly taking over control and power from the former colonial master than by insisting on official monolingualism in their favour. Any change of language policies in favour of national languages to complement, if not replace, the foreign colonial languages as official languages on the national level in the long run, would put them at a disadvantage in terms of communication and control. The ex-colonial foreign language, therefore, comes in handy for "mass exclusion" from control and access to power and resources.

Language, identity and attitudes

The "language question in Africa" has another ideological dimension, namely that of being burdened with aspects regarding notions like *African Identity/Personality* and *African Renaissance*, again with a distinctly anti- (neo-) colonial weight. This ideology has a long intellectual tradition in Africa grounded, for instance, on the writings and teaching of Cheikh Anta Diop, and taken up by Nelson Mandela and Thabo Mbeki in their quest for *African Renaissance*, for instance, and by many expert linguists, sociolinguistics and educationists working in and on Africa.³

People everywhere tend to have very strong attitudes towards languages, particularly in terms of attributing and recognising status and prestige. Language attitudes reflect people's changing views on society and culture. Negative attitudes towards African languages are widespread and shared – surprisingly – by many African people and expatriate government advisors. According to Obanya (1999b), they are deeply rooted in the fear of social change, particularly on the part of members of the post-colonial elites, but also on the part of their expatriate advisors and non-linguist experts from donor countries and agencies. This fear is based on the potential for marginalised sections of population, such as minorities, illiterates, women and even children, to become empowered through official recognition of their languages, a fact that would detrimentally affect the balance of power and threaten the privileges of the dominant elite.

³ In most, if not all, available documents which refer to the notion of African Renaissance, however, the role of the indigenous African languages remains somewhat marginal if not obscure. Even where the "African soul, identity and creativity" is evoked, there is no linking of these concepts to the predominantly oral expression in the two thousand or more ancestral mother tongues (see Wolff, 2003b).

Generally speaking, their current privileged situation was engendered as a legacy of colonialism and is perpetuated via neo-colonial educational and media structures. Acceptance of the perpetual dominance of "Western culture" (with its politico-economic ramifications) often comes disguised in terms such as universalism or globalisation.

Positive attitudes towards African languages, conversely, connect to the theoretical framework of indigenisation. This rests on the exploitation of the creative intellectual and educational resources provided by indigenous African cultural heritage and value systems. It also places such educational systems into the neighbourhood of the detested "Bantu Education" of the apartheid period in South Africa (see also Chapters 2 and 8) – at least in the eyes of its opponents from the quarters of the propagators of Westernisation and globalisation. This accounts for the observation that members of the modern African "elites", intellectuals and decision-makers, tend to be distinctly divided into two factions. The first is fervently opposed to the actual empowerment of the African languages (which quite often they don't master well themselves, preferring English, French or Portuguese); the second strongly advocates an enhanced role for indigenous languages, particularly in basic education and for creative expression of the "African personality". Quite surprisingly, adherents of these antagonistic schools of thought fail to see the benefits of a multilingual approach to the problem that would allow the possibility of both sides winning.

Language as both "tool" and "symbol"

The role and functions of language in society should not be underestimated, yet in public debates about language in Africa one often witnesses an overloading of language with functions that it does not perform. Metaphorically, this means identifying the tool with the object or purpose to which the tool is applied, for instance in providing sophisticated scientific education. This is true for the originally foreign colonial languages that are generally viewed as being somehow superior and more adequate "tools" for purposes of learning in formal education. It is also true for the African languages, which are – antagonistically – viewed as being inferior and inadequate "tools" for matters of formal education (see Mateene, 1980). Here the languages, which happen to be those of the former colonial masters, become equated with the type and degree of the economic, political, technological, and scientific development that the societies of the former colonial masters represent. At the same time, the ex-colonial language is viewed as a "symbol" of political dominance and cultural superiority. Antagonistically, the African languages are viewed as "symbols" of political and cultural inferiority and underdevelopment.

Language revalorisation and empowerment through extended usage

The indigenous languages and the so-called traditional cultures of Africa must not necessarily be viewed as "good" in themselves just because they belong to some un-empowered "ethnic" groups or "underdeveloped" countries. In any case, they need be adapted to the requirements of socio-cultural and economic development, considering the project of building a democratic society as well as the inescapable context of globalisation (Rabenoro, 1999).

The best if not only way for un-empowered languages to become empowered is through expanded usage in new domains. This applies, first, to their full integration into systems of formal and non-formal education. Any revalorisation and empowerment of the African languages would be based on the sociolinguistic axiom that language development (in terms of status, prestige, and adaptation to new domains of usage) is through language usage in new domains. Language prestige is equivalent to language use in prestigious domains, including not only higher levels of education, but also all national economic, political and cultural business. This expert view, however, has not yet been effectively publicised and propagated to politicians, decision-makers and administrators in charge, hence the need for integrated social marketing with regard to language policies (Wolff, 2004).

Multilingualism in Africa: Natural asset and resource

Multilingualism (and its twin, multiculturalism) is and will remain an integral feature of African reality, as in much of the rest of the world. All political, social, cultural and educational planning must take this fact into account. As Annamalai (2003) points out, even for the former colonial powers "monolingualism at home" is a myth rather than a reality, as a non-ideologically-biased look at the sociolinguistic situation of France and Great Britain, for instance, will reveal.

The African continent is the home of about one one-third of the world's living languages, figures range between roughly 1,200 and 2,000 indigenous African languages of a total of about 5,000 to 7,000 languages still spoken around the globe. Pessimistic views on the survival rate of languages in the world assume up to 90 per cent of today's languages will die within the next 100 years. Whether or not we are willing to share these views, we are left with the basic political

questions of (a) whether at all to address the issue of language in education (in the light of a few hundred languages still remaining and spoken by large sections of populations in Africa) or (b) leaving the status quo unchanged, despite its miserable performance in terms of desired results and cost-effectiveness (see Chapters 2-6 of this volume).

In general and in non-formal domains, Africans know how to use their multilingualism as an asset. In non-formal domains, people come into contact through travel, marriage, and commerce for example, and learn each other's languages spontaneously and based on needs. They allocate different functions to the languages they speak. So at home, in the street and community Africans celebrate their everyday multilingualism. However, ironically, multilingualism is viewed as a problem in administration and formal education.

Quite clearly, there were expectations fostered by early post-independence governments in Africa and their expatriate advisors that the colonial language would develop into a viable medium of national communication. Ideally, it would become a symbol for national unity that would transgress all ethnico-linguistic divisions of the country, because – not being a "tribal" language associated with any already-powerful population group in the country – citizens might consider this a "neutral" language in terms of ethnic rivalries. Sociolinguists will argue, however, that there is no such thing as a "neutral" language, particularly not with regard to "official" languages that are, by definition, symbols and tools of power.

"Big" versus "small" languages

Given the overall demographic development in Africa, the numbers of speakers of given (usually) minority languages must be treated with great care. The virulent assumption in colonial and immediately post-independence days was that the "problem" of there being so many minority languages would soon find a solution. It was expected that speakers of these languages would "die out", either by biological discontinuity under the impact of ecological and social changes (as in the case of most Khoisan language speakers in Southern Africa), or by shifting to another language (a lingua franca or even the official language). This has proven to be wrong. On the one hand , even though pockets of monolingual communities, mainly in rural areas, may become increasingly smaller, rather than undergoing complete "language), individual multilingualism has increased considerably. This is particularly so with lingua francas (such as Kiswahili, Hausa, Fulfulde, Bambara and others) which spread dynamically as second or third languages, including former monolingual pockets due to enhanced mobility, communication and, not least, 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 in what sociolinguists refer to as "stable bi-/trilingualism".

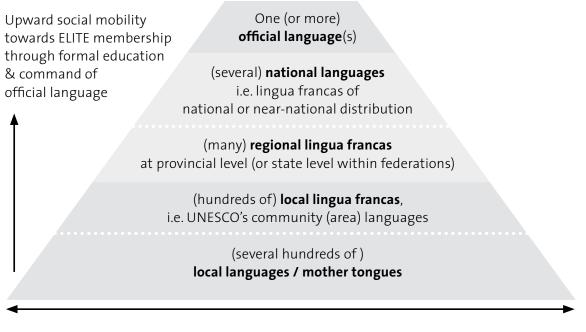
Negative reactions towards multilingualism in education are often based on numerical considerations, which suggest that to investment in minority languages is not cost-effective because these languages only have small numbers of speakers. In Africa, only 72 indigenous African languages have more than 1 million speakers (and only 16 of these have more than 5 million, counting mutually-intelligible isiZulu and isiXhosa as different languages and including Malagasy and Afrikaans). As in the rest of the world, the vast majority of African languages have less than 100,000 speakers, probably even less than 50,000. Therefore, only considering "big" languages for educational purposes would amount to neglecting about 96 per cent of Africa's mother-tongue speakers. Quality-oriented education must base language policy on the linguistic resources that are already available, i.e. multilingualism involving the mother tongue and local or regional lingua francas (national languages of wider communication), if not the official language (or distinct varieties thereof) in certain metropolitan environments.

The African "Polyglossia Pyramid"

The majority of individuals and communities in Africa tend to live and function well in multilingual settings that are characterised by a di- or triglossic communication landscape.⁴ Characteristically for the African situation, languages with higher prestige (i.e. the "official" languages of the country) that provide access to the ranks of the "elites" are restricted to only few sections of the population. On the other hand, the languages at the lower end of the prestige scale (the "local" languages, or: "mother tongues") are spoken by the vast majority of the populations. The communication landscape is further characterised by lingua francas for inter-ethnic communication at various levels of distribution (areal/regional, national, cross-border). In a highly abstract model of representation, this situation can be illustrated in terms of the "Polyglossia Pyramid":

⁴ The terms "diglossia" and "triglossia" refer to a hierarchical relationship of two or three languages in terms of higher and lower prestige, power and "market value" for the speakers.

Figure 1.3 The "Polyglossia Pyramid" (adapted from Obanya, 1999b)



Distribution of language competence among national population

Additive bilingual or trilingual educational systems, therefore, that would make maximal use of children's and adults' multilingual competence need to take the prevalent communication patterns into account in the following way. The technical notion of "bilingual" education needs to accommodate local/regional trilingual situations with two additional second languages, as children's situation may require where the local or community/area language is not the same as the relevant national language, (if such exists). The models are illustrated for theoretically possible cases in Niger and Cameroon (Table 1.1).

Table 1.1 Theoretical cases of bi- and trilingual models of education (Niger, Cameroon)

| | | Niger | | Cameroon | | | |
|---------------------------------------|--|--------|-------|----------------|--|--|--|
| (1) Additive bilingual model: L1 + L2 | | | | | | | |
| L1 (MOI) | = local language/mother tongue, OR: community/area language | Hausa | Zarma | Ewondo | | | |
| L2 (SOI) | = official language | French | | French/English | | | |

| | | Niger | | Cameroon | | | |
|--|--|--------|----------|----------------|--|--|--|
| (2) Additive trilingual model L1 + L2 + L2 | | | | | | | |
| L1 (MOI) | = local language/mother tongue, OR: community/area language | Kanuri | Gulmance | Gisiga | | | |
| L2 (SOI) | = national language | French | | French/English | | | |
| L2 (SOI) | = official language | French | | French/English | | | |

MOI = Medium of instruction SOI = Subject of instruction

Naturalness of children's multilingualism in Africa

Observation of African children of preschool and primary school age in multilingual settings testifies to multilingualism as a natural behavioural pattern: playful code-switching are highly effective communication strategies that children in Africa grow up with in their peer groups (Khamis, 1994). Corroborating evidence comes from research on early childhood multilingualism in Africa as carried out under the auspices of the Project for the Study of Alternative Education in South Africa (PRAESA) at the University of Cape Town. Anyone who has responsibility for planning and deciding on the linguistic aspects of educational policies would be well advised to view multilingualism as an important resource to be made use of as widely as possible. This is because it draws on children's prior experience, their already-established abilities, and relates directly to their linguistic, social, and cultural behavioural patterns in their out-of-school environments (Wolff, 2000b).

These findings stand in contrast to widespread negative attitudes towards early childhood multilingualism virulently observable in European societies and the United States (see, for instance, Oksaar, 1989, and Wardaugh, 1992), which have a strong impact on the way Africans (both elites and masses) think about multilingual educational programmes involving mother tongues. This attitude is paired with a number of misconceptions about the purported damaging effects of bilingualism on the child, which – following widespread popular but uninformed impression (see Crystal 1997) – suggest that children will learn neither of the languages properly and remain "semilingual" in both. Psycholinguistic and second language acquisition research over almost 100 years shows, however, that apart from pathological cases where children suffer from physical or mental deficits independently, bi- or multilingualism has never done harm to the mental and cognitive development of any child. On the contrary, children growing up with two or even more languages, which they have acquired simultaneously or successively during early childhood, tend to outperform monolingual children in their school career in practically all intellectual activities and at all times – provided healthy, stable, and thereby conducive environments both at school and at home.

The following "myths" regarding child multilingualism are listed and shown to be false in Dutcher and Tucker (1995: 2, as quoted in GTZ, 2003: 21):

• Myth 1: Children have learned their first language by the age of six when they go to school.

Current research indicates that at least 12 years are necessary to learn one's first language.

• Myth 2: Children learn second languages more quickly and easily than adults.

[W]hen controlled research is conducted, in both formal and informal learning situations, results typically indicate that adult (and adolescent) learners perform better than young children [...] The exception is in pronunciation where in most cases children do have the advantage.

 Myth 3: The younger the child, the more skilled in acquiring a second language.

[...] Recent research cites evidence to the contrary... A study of Englishspeaking children in Canada in late-immersion programmes (in which the second language is introduced in grades seven or eight) have been found to perform just as well or better on tests of French language proficiency as children who began their immersion experience in kindergarten or grade one [...].

• Myth 4: The more time students spend in a second language context, the quicker they learn the language.

This is the more the better myth: that the more exposure to the secondlanguage the quicker the learning of the second language... For the development of the second language, the amount of time in the first language is much more important than the amount of time in the second. In other words, development of the first language is more

important than the time on task in the learning of the second language. This argument is counter-intuitive, but is born out in many studies...

• Myth 5: Children have learned a second language once they have learned it [sic!].

Researchers now consider that learning a second language requires two different kinds of skills: (1) social communication; and (2) academic language skills. To learn the first, requires only one or two years; to master the second, at the level approaching grade norms, requires from five to seven years [...].

A GTZ brochure on *Universal Primary Education in Multilingual Societies* has a few more myths to add from their 25 years of experience in Latin America and sub-Saharan Africa (2003: 22):

• Myth 6: Scientific and mathematical contents can only be transported by the official language.

There is no reason why African languages should be inapt for mathematics and science. Teaching both subjects in African languages with textbooks in the respective languages began with the first missionaries in the middle of the 19th century. It continues today in various African countries and no evidence can be found proving that weak performance in mathematics is due to an African language.

• Myth 7: Without the official language no broad communication would be possible in the capital and in towns.

This argument deliberately ignores the fact that the immigrant groups in African towns generally organise communication according to the language of the prevailing linguistic majority or to the economic power of a linguistic group. The children of the minority groups are generally bi- or even trilingual. The official language is often not part of this natural multilingualism.

• Myth 8: Children of civil servants are excluded from education when one parent is transferred to posts outside their language area.

This argument is very popular amongst civil servants. The consequence of this argument would be to neglect Universal Primary Education in multilingual societies for the sake of a privileged socio-professional minority.

• Myth 9: Globalisation forces everybody to master English.

Trade across linguistic borders, commerce, science, tourism of some sort has always existed. This interaction has dramatically increased in the last twenty years and, consequently, so has the necessity for a growing number of people to add competency in English to their professional profile. The difference with the preceding centuries lies in the size of the minority concerned. The minority has dramatically increased but it is still a minority [...].

• Myth 10: The parents want their children to be taught in the official language.

In general parents are confronted with the question if they would rather opt for the official language of the respective African mother tongue in the education of their children. Given the prestige of the official language and the supposed equation with employment the question induces the answer. If asked what they would prefer their children to learn at school they answer by giving a list. The official language would still be on top but this has little to do with a deliberate statement against the mother tongue as medium of instruction based on at least some sort of technical information [...].

Myth 11: Teaching the mother tongue was the reason for the educational failure of the past.

On the condition that not all international research findings on educational achievement, even the most cautious ones, are completely wrong, these failures cannot be attributed to the use of the mother tongue as medium of instruction but rather to the failure to implement a sound language policy or to an undecided language policy.

These myths, therefore, reflect uninformed assumptions and folkloristic prejudice, and/or rest on poor social research methodology⁵. Rather, all available evidence shows (see Chapters 2-6 of this volume) that continued maintenance of the mother tongue (or a national language) medium of instruction plus the teaching of the official and other foreign languages by skilled teachers will secure quality education, in Africa as much as in the so-called developed countries.

Africa's lingua francas and cross-border languages as prime resources for multilingual education

As most languages have less than 100,000 speakers, lingua francas and crossborder languages that tend to have much larger numbers of speakers using these

5 i.e. by asking parents "either-or" questions ("English OR local language?") without presenting the "as well as" option ("Local language AND English?") to them for unbiased answers.

languages as their second, third or even fourth language in addition to their mother tongue are of concern for economising on means of communication, nationally and across borders with adjacent countries in Africa. Languages such as Hausa, Fulfulde, Jula, Bamanankan and others have been and are being used as effective lingua francas in cross-border trade and, for instance, in campaigns against HIV/AIDS, which, with regard to one of the most sweeping ways of spreading,hasbeen referred to as a "truck-drivers' and prostitutes' disease". To reach people like truckers, who carry out transnational commerce, and local prostitutes, for instance, governments are obliged to use these cross-border languages to conduct their health campaigns. Non-African languages such as English, French, Spanish and Portuguese will not reach the most important target groups^{.6}

National lingua francas and cross-border languages, therefore, provide valuable resources for regional communication and cooperation, prevent doubling or tripling of efforts, and allow burden-sharing. There are still problems, however, concerning the deplorable absence of nationally- and internationally-harmonised standards of codification ("standard orthographies"). These are rooted in divisive approaches to identifying "tribes" and "tribal languages" in the colonial past, and in the rivalries between missions of different religious denominations who used to prefer their congregations to have "their own bibles" (i.e. use different and distinct orthographies).

The high degree of individual multilingualism in Africa is largely due to two major factors:

- the usually rather small number of speakers of one's mother tongue that is not usually acquired or learned by neighbouring communities that have their own languages; this creates the need to use local, regional or even national lingua francas as second or third languages for inter-ethnic communication;
- the higher prestige and socio-economic potential of national or official languages that are instrumental, if not a prerequisite, for social and geographic mobility.

These needs have made Africa the home, already in pre-colonial times, of several lingua francas that function on different levels (local, regional, national,

⁶ I owe this particular line of argument to Hassana Alidou (personal communication).

international). Multilingual African individuals may actively command any number of languages along the sociolinguistic scale of communicative scope and domains of use within any one independent country (see Figure 1.3 above). For instance:

- MALI has 12 languages. Ninety per cent of the population use four of them and 60-65 per cent use only one language, Bamanan, as first (L1) or second language. Twenty years ago this percentage was around 40 per cent; the increase is due to growing numbers of users of Bamanan as second language rather than the demographic increase of the ethnic Bamanan.
- BURKINA FASO has about 60 languages for a population of 9 million, half of which is morephone (i.e. either has More as their mother tongue or is at least bilingual in their mother tongue and More).
- SENEGAL has six major "national" languages (Diola/Joola, Mandinka, Pulaar, Seereer, Soninke, Wolof) but uses French as the only "official" language which, however, is spoken by at most 15 per cent of the population, even after having dominated the educational system of the country for more than 100 years, as opposed to Wolof which is spoken by about 80 per cent of the population.

The development of lingua francas in Africa predates colonial times with the effect that many of them were not confined to the various former colonial territories and, subsequently, the international borders of the independent states in Africa today. These cross-border languages are – generally and quite falsely so – not counted among the "international" languages in Africa; UNESCO refers to them as Inter-African languages. They have a particularly high potential for extended use, including education and inter-African communication. Based on UNESCO's study (UNESCO/BREDA, 1985), the following table has been slightly rearranged from Obanya (1999a).

Table 1.2 Some of Africa's shared (cross-border) languages, adapted from Obanya (1999a: 95)⁷

| Language | Countries covered | Speakers (in millions) |
|--------------|--|---------------------------|
| Kiswahili | Burundi, D.R.Congo, Kenya, Malawi, Mozambique, Rwanda, Somalia, Sudan, Uganda, Tanzania | 38 |
| Hausa | Benin, Cameroun, Chad, Ghana, Niger, Nigeria, Sudan | 34 |
| Yoruba | Benin,Nigeria, Togo | 12 |
| Fulfulde | Benin, Burkina Faso, Cameroun, Gambia, Ghana, Guinea, Guinea Bissau, Mali, Mauretania, Niger, Nigeria, Senegal, Sierra Leone, Togo | 11 |
| Lingala | Congo (Brazzaville), D.R.Congo | 8.5 |
| Kikongo | Angola, Congo (Brazzaville), D.R.Congo | 8 |
| Shona | Mozambique, Zimbabwe | 7 |
| Luo | Kenya, Tanzania, Uganda | 4 |
| Ewe | Ghana, Togo | 3.3 |
| Wolof | Gambia, Mauretania, Senegal, | 3 |
| Mandinka | Côte d'Ivoire, Gambia, Guinea, Guinea Bissau, Liberia, Mali, Senegal, Sierra Leone | 2.8 |
| Songhay | Benin, Mali, Niger, Nigeria | 2.4 |
| Dyula | Burkina Faso, Côte d'Ivoire | 2 |
| Kanuri | Cameroun, Chad, Niger, Nigeria | 2 |
| Crioulo | Cape Verde, Equatorial Guinea, Guinea Bissau, São Tomé and Príncipe | 0.8 |
| Fang | Cameroun, Congo (Brazzaville), Equatorial Guinea, Gabon | 0.8 |
| 16 languages | 34 countries | > 140 million |

International harmonisation of cross-border languages in Africa, as already on the agenda of the African Academy of Languages (ACALAN) under the auspices of the African Union (AU), would appear to provide a rewarding field of international cooperation with the support of NGOs and donor organisations. It also offers cross-border publishing potential and the creation of a wider postliteracy and publishing environment for African languages (see Chapters 7 and 8).

7 Note that, with the above population figures representing estimates from the early 1980s, Africa's high population growth will by now, 30 years later, have made these figures considerably higher!

Educational efficiency and the language factor

"[I]n the case of Africa, the retention of colonial language policies in education contributes significantly to ineffective communication and lack of student participation in classroom activities. Moreover, it explains to a large extent the low academic achievement of African students at every level of the educational system" (Alidou, 2003: 95).

As has been pointed out by several African authors (see, for instance, Alidou, 2003, but also Bamgbose and others in several publications over the years), traditional education in pre-colonial Africa did not suffer from language-in-education problems. Local mother-tongue languages were used quite naturally within each ethnic or linguistic group for cultural socialisation of the young generation. In areas where Islam was entrenched as a religion, Arabic (written in what was called ajami, i.e. adaptations of the Arabic script) would also come in as "specialised language" in the domain of religious instruction as part of what is now referred to as the still-persisting institution of Qur'anic education in large parts of Africa. One could say, therefore, that multilingual education had a long tradition in Africa reaching far into pre-colonial days. Consequently, the much deplored language-in-education problems and controversies only arose with the advent of colonialism and the dominant impact of the languages of the colonisers.

Given the almost overall multilingual setting of schools and universities in Africa, there are basically three options for language-in-education policies with regard to the medium of instruction issue:

- total endoglossic strategies, i.e. mother-tongue/national language medium of instruction, and ideally throughout the whole system (primary, secondary and tertiary cycles); these would almost guarantee the desired results but are in place practically nowhere in Africa;
- **total exoglossic** strategies, i.e. "straight for English/French/Portuguese" strategies without giving any room to mother tongues or indigenous lingua francas that children are already familiar with by the time they enter school; these strategies tend to have disastrous effects in terms of efficiency of learning;
- **combined endo- and exoglossic** strategies in the shape of either (a) subtractive multilingual models in which the indigenous language of

instruction is totally replaced, sooner ("early-exit") or later ("late-exit"), by the foreign language; or (b) additive multilingual models in which the foreign language is added to the indigenous language which is retained throughout the education cycle. Out of these, subtractive bilingual models have proven to be far less successful than additive models.

The total endoglossic strategy has been applied only once in Africa, i.e. in Somalia (Somali). Partially, at least, it has been effected in countries such as Tanzania (Kiswahili), Malawi (Chichewa), and imperial Ethiopia (Amharic), in which a "dominant" national language is or was, however, also imposed on children of various mother-tongue backgrounds for most if not the whole of the primary cycle. The total exoglossic and the subtractive (early-exit) combined endo- and exoglossic strategies dominate educational systems on the African continent, but have failed to establish themselves as adequate and efficient (with regard to educational efficiency see Stroud, 2002) Taking French as an example of a total exoglossic strategy, Alidou and Jung (2002: 66) point out:

"Regarding the effectiveness of the use of French as the exclusive language in education, several studies indicate that there is a strong correlation between post-colonial language policies and the high rate of academic failure (high attrition and wastage rates) experienced by students in francophone African countries... Most pupils who enter formal schools in Burkina Faso, Mali and Niger have no knowledge of French, the language of instruction; yet, they are expected to participate actively in learning. Secondly, French is not the mother tongue of any ethnic group in these countries, therefore teaching in French as a first language is certainly not appropriate. Clearly, the language policy implemented in the schools is bound to produce negative results, as it ignores the basic findings of second and foreign language acquisition and bilingual education in multilingual settings... In particular, the policy fails to consider the role that longer exposure to meaningful linguistic input in an second or foreign language plays in developing adequate academic proficiency in that language [...]" (Alidou and Jung, 2002: 66).

The results of pedolinguistic and psychological studies over the last 80 years strongly suggest that multilingual exposure should ideally take place from the earliest stages of the child's development, because, among other things (see Oksaar, 1988 and 1989, for bibliographical references to various sources between 1914 and 1989),

- small children who simultaneously acquire two languages keep these languages distinct and associate different value systems with them;
- bilingualism enhances analytical skills, allows for more complex views of reality, and facilitates learning of a third language;
- bilingual children tend to show a higher ability to imitate, show higher cognitive flexibility and spontaneity, and are less inhibited;
- bilingual children tend to show reflections on structural properties of their mother tongue and the other tongue much earlier (at the age of four to five years), which testifies to abstract operations which, following the influential model theories of Jean Piaget⁸, would only be expected from much older monolingual children;
- bilingual children tend to learn to write and read in both languages much earlier (65 per cent of the bilingual children in a project referred to by Oksaar (1988 and 1989), could do so by the age of 4-5), which also testifies to the abilities for enhanced abstract comparative operations and analytical capabilities.

However, despite considerable research that has been devoted to the issue worldwide and in Africa, it is still difficult to determine the exact degree of impact that teaching in the mother tongue has on academic success – other than that it is a factor of primordial importance. Other aspects come into play, such as the curriculum and selections of culture-relevant content, and the quality of textbooks and other materials. Most pertinent of all factors are the quality of the teachers, their professional training and skills (again and particularly in both the mother tongue[s] or national language[s] and the colonial language), and the teaching methods they are able to use. What appears to be certain is that from a pedagogical standpoint, all other things being equal, it is far better to teach children in their mother tongue or, if that should not be feasible, in a language they already know upon entering school. This will be most likely a regional or national lingua franca shared by many other children in the same school, if located in urban quarters or particularly linguistically heterogeneous areas. In view of the overall importance attributed to knowledge of the official (foreign) language, and taking into account the salient role played by African

⁸ Jean Piaget was, among other things, a developmental theorist well known for his work and theories on cognitive development in children.

lingua francas, combined endo- and exoglossic strategies in terms of additive bi- or trilingual models would appear to provide adequate solutions to many of the burning problems of education in Africa.

Language standardisation and multilingual literacy

Even if it is true that there are no orthographies (yet) for the majority of the 2,000 or so African languages, this fact provides little reason to object generally to the use of African languages in education. It is a task that could be achieved easily by trained linguists in much less time and for much lower costs than generally assumed by the uninformed public. Creating literacy and a sustainable postliteracy environment, however, will take more time and effort and must involve larger sections of the speaker populations (intellectuals, teachers, poets, religious personalities, and so on) and, to a certain extent, must or should involve local publishing facilities (see Chapters 7 and 8). Awareness is minimal, however, about the degree to which African languages have already been turned into "written languages", which as a rule are major languages or lingua francas (national languages) with wide catchment areas – regional or national. The following Table 1.3 from UNESCO (1985) reproduced in Obanya (1999b) lists 217 "written" African languages. These would only make up just over 10 per cent of all African languages, but their reach could be near 50 per cent of the African population – provided they were literate in these languages – given the high degree of multilingualism and the nature of many of these languages as regional or even national lingua francas. (Unfortunately, there are no exact figures available on first language vs. second language usage for most of these languages.)

Table 1.3

| Country | Written languages | Population in millions |
|----------------|-------------------|------------------------|
| Benin | 7 | 12.0 |
| Burkina Faso | 12 | 11,4 |
| Cameroon | 38 | 14.3 |
| Central Africa | 4 | 3.5 |
| Chad | 4 | 6.9 |
| Côte d'Ivoire | 19 | 14.6 |
| D.R.C. (Zaire) | 7 | 49.2 |
| Ethiopia | 11 | 62.0 |
| Ghana | 19 | 18.9 |
| Guinea | 6 | 7.7 |

A selection of Africa's 'written' languages, Obanya (1999b: 83)

| Written languages | Population in millions |
|-------------------|--|
| 7 | 29.0 |
| 4 | 2.7 |
| 9 | 11.8 |
| 5 | 10.1 |
| 22 | 121,8 |
| 6 | 9.0 |
| 6 | 4,6 |
| 8 | 44.3 |
| 13 | 4.4 |
| 3 | 21.3 |
| 7 | 8.7 |
| | 7 4 9 5 22 6 6 8 13 3 |

The notion of literacy is a central issue in all educational programmes and must be construed to mean literacy in all the languages which are used in the educational system. Likewise, and generally overlooked in the African context, is the ability to write in several different writing systems that coexist on the continent, together with the script based on the Latin/Roman alphabet.

Quality-oriented education for Africa must involve the development of both functional and academic multilingual literacy. Here, too, the sound pedagogical principle of proceeding from the known and familiar to the unknown and unfamiliar must also apply; in other words, all learning must take place in the local/familiar language (mother tongue/national language, first language), and literacy must also begin in this language. Knowledge and literacy skills can then, in due course, be transferred into other languages such as the foreign/official language.

Language attitudes

Planning and implementing language and language-in-education policies for post-colonial Africa have met in the past, and still meet today, with a fair amount of negative attitudes on the part of most stakeholders. These negative attitudes are directed towards (a) the feasibility of multilingualism in education, (b) the value of indigenous African languages for quality education, and (c) the value of the official/foreign language as medium of learning. Widespread negative attitudes are based on prejudice, stereotype and cliché that lead to "uninformed choices" (Bamgbose 2003: 53), for instance, when it comes to deciding on the medium of instruction in schools. Such uninformed attitudes are shared by members of the African political and administrative elites, many of their expatriate expert counterparts (notably economists and social scientists without any background in sociolinguistics), and the affected general public (Bamgbose 2003: 53 et passim, 2004a: 94 *et passim*), in particular teachers, parents and pupils. The choice is – quite falsely – seen to be one between either the official/foreign language or the mother tongue/national language. Multilingual solutions to educational challenges are, as a rule, not considered as viable, despite the objective actuality that multilingual systems reflect the African situation best.

Popular objections to the promotion of African languages

Obanya (1999b) lists eight distinct areas of concern that, in the eyes of decisionmakers, pose major challenges to the promotion of African languages in education, including

- (i) the multiplicity of languages,
- (ii) the multi-ethnic nature of urban areas,
- (iii) the low level of technical development of African languages,
- (iv) the official status of indigenous languages,
- (v) the hostility of Africans to the study of their own languages,
- (vi) the limited personnel and material resources for teaching indigenous languages,
- (vii) the assumed high costs of educating in African languages, and
- (viii) even long-term ill-effects on the learner.

As can and has been shown, some of these issues are ill-conceived and do not stand the test of what has been demonstrated by research, practical experience, and day-to-day evidence. Others can be met by consistent language politics in favour of multilingualism, involving both the indigenous African languages and the official/foreign languages. The real obstacles to the promotion of African languages in education lie elsewhere, not in the spheres listed, but often in the "fear of the unknown" (Obanya, 1999b).

"It is ... noticeable that outside academia often, the public discussion on UPE in multilingual societies is often dominated by all sorts of objections.

The all-important advantages of teaching in the mother tongue and its technical feasibility are usually marginalised if not silenced" (GTZ, 2003: 22).

Negative language attitudes

The post-colonial African elites are largely defined through their linguistic behaviour (i.e. a preference for using the official ex-colonial language). This is because they have succeeded in a foreign-language-based education system in which the colonial language was the dominant medium of instruction. However, they tend to disregard the fact that their individual success is no guarantee for the overall efficiency of the system (Roy-Campbell, 2001). Largely based on their own educational success stories, the idea of using indigenous African languages in education, or generally for official purposes, tends to meet with strong opposition from the political elites. Neville Alexander (personal communication) aptly calls this the "status quo maintenance syndrome":

"[T]he new elite, black and white, is prepared to do no more than pay lip service to the promotion of multilingualism or the development of the African and other marginalised languages... The reason for this tendency is that the new elites, in practice, are quite comfortable with simply taking over the colonial state, 'reforming' it to the extent that they put 'black faces in white places', but allowing everything in essence to remain the same" (Alexander, 1999: 3).

With regard to the so-called masses of the population, decades and centuries of marginalisation have created deep-rooted negative prejudice in the minds of many Africans towards their own indigenous languages, which stems from traumatic experiences during colonial times:

"With years of indoctrination, many people have come to accept that 'real' education can only be obtained in a world language such as English. Even the idea that a child will benefit if his or her initial education is given in the first language is disputed by many so-called educated parents. Here, there is undoubtedly ignorance and prejudice at work and a major aspect of the implementation of a policy of using indigenous media of instruction should be an enlightenment campaign designed to explain in terms that the layperson can understand, the arguments in favour of the policy" (Bamgbose, 2000a: 88). Where formal education is exclusively or predominantly linked to an official language of non-African origin, African languages stand little chance of being accepted as languages of teaching and learning by the vast majority of the African peoples unless their uninformed attitudes can be changed by awareness campaigns and successful social marketing for superior educational models.

Formal and informal discourse, particularly by and among Western experts without any professional (socio-) linguistic background (the mainstream economic and social science consultants and donor representatives), tends to testify to rather critical attitudes towards multilingualism and the use of indigenous languages for education in Africa (see Wolff, 2006a), if the issue is addressed at all.⁹This is largely due to inherited negative attitudes towards non-elitist and particularly childhood multilingualism, because multilingualism is not generally accepted as an advantage in Western cultures.

"There is a long history in certain western societies of people actually 'looking down' on those who are bilingual. We give prestige only to a certain few 'classical' languages (e.g., Greek and Latin) or modern languages of 'high' culture (e.g., English, French, Italian, and German). You generally get little credit for speaking Swahili and, until recently at least, not much more for speaking Russian, Japanese, Arabic, or Chinese. Bilingualism is actually sometimes regarded as a 'problem' in that many bilingual individuals tend to occupy rather low positions in society and knowledge of another language becomes associated with 'inferiority'. 'Bilingualism' is seen as a personal and social problem, not something that has strong positive connotations" (Wardaugh, 1992: 101).

Oksaar (1989) observes that in Western (particularly European) cultures, multilingual adults are generally admired, but multilingual children tend to be pitied. Modern pedolinguistic, psycholinguistic and neurophysiological research on the cognitive development of children refute this Western heritage, which is intimately linked to neo-romantic notions concerning the Western European nation-state ideology of the 19th century: "one country – one nation – one culture – one language". There is one more cultural impact from Western and

⁹ The perusal of many relevant documents relating to NEPAD, African Renaissance, Education for All, Millennium Development Goals, etc. shows that issues of multilingualism, particularly the use of indigenous languages, are conspicuously absent in mainstream development discourse. "Education" as such is frequently mentioned, but in which language or languages remains, as a rule, completely unaddressed. It can be inferred from the context, however, that education in the official (foreign) language is taken as "given".

Central Europe surviving from the heydays of romanticism and nationalism in the 19th century, which can be referred to – quite provocatively – as "monomania" (Wolff 2000a). By this I refer to an ideological position regarding "oneness" in terms of race, nation, territory, culture, language and leadership. Symptoms are the discrimination against, if not eradication of, non-standard "dialects" and indigenous "vernaculars", a strong opposition to multilingualism and diglossia involving indigenous languages, a strong preference for political decisions fostering monolingualism and monoculturalism, and – more recently – a positive attitude towards globalisation.

In the African context, the negative attitude towards multilingualism involving indigenous African languages often rests, at least implicitly or subconsciously, on the idea of the superiority of colonial languages and cultures and the general inferiority of the languages and cultures of the colonised populations. Their languages are usually discriminated against under such terms as "dialects" or "vernaculars". The negative attitude against "dialects" or "vernaculars" is paired with a fundamental distrust towards multilingual individuals who tend to be identified with marginalised sections of minority populations (in Europe, such discrimination would apply to immigrants and refugees, migrant workers, nomadic people, children from nationally mixed marriages and so on). One set of clichés that is virulent with the general public relates to assumed properties or non-properties of African languages: African languages are not proper "languages" (because they are not "standardised") but merely "dialects" (or sub-standard), they possess no grammar, have only limited vocabulary with little or no abstract terminology, and cannot be written. Although linguists have debunked these notions for a long time, their refutations have not yet been communicated or accepted widely. African languages are widely perceived by some as being "primitive" idioms with limited communicative value, only to be spoken by illiterate hunter-gatherers, farmers or cattle-herders and useful only for culturally highly restricted local matters. According to this perception, African languages are not apt for use for any advanced (particularly written) communication pertaining to political, economic, cultural and social matters; in particular, not for anything to do with modern technology, science, and political philosophy. This widespread attitude of originally non-African provenance has dramatically damaged the image of any indigenous African language even in the eyes of some, if not many, of their own speakers.

Speaking from the author's personal experience of several decades as a member of the international African Studies scientific community, there appears to be another negative attitude virulent among non-linguist experts on development cooperation with Africa. This is an attitude of "anti-lingualism" that deliberately belittles the need to take (socio-) linguistic issues into account. This attitude is probably based on two facts that set these experts apart from professional sociolinguists and development or language practitioners with long experience "in the field". The first is based on their academic training under non-regionalised general curricula for economics, political science and sociology. For instance, they remain largely unaware of the complex issues that need and deserve the attention of sociolinguists in the African context. The second is that they are, as a rule, not able to speak one or more African languages in the first place (and, feeling uncomfortable about this professional deficit, they create a culture of merciful silence or taboo around the issue). This attitude also explains why sociolinguistics is hardly ever considered an indispensable part of the academic education for the social and cultural sciences in general, and not even for future "experts" in development studies in particular.

Language and development in Africa

Without reference to "language" as an important factor, we cannot discuss and analyse seriously issues which relate to political systems and democracy, juridical and educational systems, the human rights situation, the economy and social mobility, the role of electronic and print media in society, issues of cultural autonomy and the status of minority groups, and so on. This is so no matter how narrowly or widely we define "development". The following premises taken from Okombo (2000: 43) would appear to be axiomatic for the African situation:

- (a) modern development relies heavily on knowledge and information;
- (b) African countries rely significantly on foreign sources of knowledge and information, especially in the areas of science and technology;
- (c) the knowledge and information comes to Africa through international languages which are not indigenous to the African continent;
- (d) for development ideas to take root in Africa and benefit from African creativity, development activities must involve the African masses, not only the elite; and
- (e) the goal of involving the African masses in development activities cannot be achieved through a national communication network (including education) based exclusively on non-indigenous languages, as is presently and most widely the case.

With regard to the role that education must play, all available research indicates that most educational systems in place, namely monolingual and subtractive bilingual models, fail the majority of the pupils and exclude the masses because they prevent access to the relevant knowledge and information needed for modern development. Faulty language-in-education policies also prevent the African masses from successful access to the official/foreign languages. Because knowledge and information come to Africa through the official/foreign languages, the critical mass of knowledgeable and informed Africans required to achieve development, therefore, will not be created in the foreseeable future for reasons of "wrong" language politics and inadequate language-in-education policies and/or deficient implementation.

The (absence of the) language factor in mainstream development discourse

On first sight and only superficially, "language" appears to have little or nothing to do with the "real" problems of economic development and poverty alleviation. This apparent misconception can be explained by the following observation. Discourse on development (as a rule with only marginal reference to education) has largely been dominated by economists, development theoreticians and planners, political scientists and political analysts. Discourse on language policies and planning, on literacy and post-literacy issues have largely remained the domain of sociolinguists and some educationists. The various experts rarely talk to each other, usually do not read each other's papers, and do not meet at the same conferences and workshops. The result is widespread ignorance with regard to the complex interrelationship between language, education, poverty and development on the part of those who tend to monopolise the mainstream development discourse.

From the early days of post-independence development discourse, the fact that most developing countries are multilingual and multicultural with ensuing problems for national communication and national unity has been correlated with high levels of poverty and high levels of illiteracy, among both sociolinguists and social scientists (see, for instance, Fishman, 1991). Fishman, an undisputed authority on matters relating to the sociology of language in developing nations, provides a critical analysis of the long-held claim that relatively higher levels of poverty correspond with highly multilingual parts of the world, like India and Africa.

"Using advanced statistical techniques, he [i.e Fishman (1991) – HEW] 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 francas and bilingualism enable many polities to attain a higher per capita GNP" (Stroud, 2002: 37).

Such insights appear to have had little impact so far on mainstream development discourse, which continues to be characterised by the almost complete neglect of language issues. Despite the correlation between the degree of multilingualism and economic and social development on the surface of things, no direct causal relationship has ever been established between linguistic diversity and economic and social development:

"[I]n all the analyses and indicators of development used by UNDP, the World Bank, OECD and so on, the language factor is never considered as part of the equation. Even UNESCO, which has advocated the mother tongue as the language of instruction since the 1950s, makes no references to linguistic diversity in its statistical data offered in the World Education Reports. Illiteracy figures are cited, but in which language – national, international or local – is unclear. This is surprising given UNESCO's concern for linguistic diversity and the development of local languages" (Watson, 1999: 6-7).

It needs to be noted that so-called "underdeveloped" and linguistically heterogeneous states rarely allow educate the majority of citizens to be educated in their mother tongue through all educational cycles, i.e. from preschool kindergarten to university. Yet this is the norm in all developed countries, irrespective of the number of languages within the national borders. The issue, therefore, is not one of quantity (i.e. number of languages and degree of multilingualism) but of quality (education in the mother tongue or a national language).

Language and social development

There are publications and documents available¹⁰ that stress the relationships between the use of indigenous languages (together with an adequate role for the foreign/official languages) on the one hand, and development,

¹⁰ See, for example the writings of Neville Alexander, Ayo Bamgbose, Paulin Djité, Kahombo Mateene, Kwesi Prah, to mention just a few out of an ever growing number of outstanding African voices, following the much earlier appeals of, for instance, Cheikh Anta Diop and Ngugi wa Thiong'o.

democratisation, true independence from colonial and neo-colonial domination, and social development in general, on the other. The most relevant document from Africa, the Harare Declaration, contains the recommendations from the *Intergovernmental Conference of Ministers on Language Policy in Africa* (1997).

Apart from paying lip-service to the empowerment of African languages, African political elites largely stand opposed to the writings and teachings of African scholars and intellectuals who strongly advocate the role that the African languages must play in political democratisation, the general decolonisation of African cultures and society, as well as in developing the capacities of African people.

"[T]he fact that the languages of scientific and technological innovation are foreign to the common people of Africa necessarily restricts the layer of creative people from whom recruits to the modern sector can be drawn. One of the unintended consequences of this situation is that the economy is necessarily orientated towards the European, and other Northern, metropoles from which the "experts" always come. If the concepts of modern science and technology were accessible through the indigenous languages of Africa, there is no doubt that the layer of creativity and innovation would be exponentially enlarged and the economies would be rendered less dependent on foreign expertise. In my own view, there is no doubt that the situation in which modernity and technological sophistication is accessible to African people only through the languages of Europe, generally speaking is one of the main reasons for the enduring mediocrity of African intellectual production in the late 20th century" (Alexander, 2000b: 20).

With regard to the gender issue which is often evoked in this context, there appears to be no in-depth research available on which to establish a robust connection between the use of the mother tongue in primary education (or bilingual education involving the mother tongue) and girls' school participation and success in sub-Saharan Africa (see Benson, 2002). However, this point is favourably taken up by the World Bank (2005) and can be found scattered through various general statements. Since gender is likely to interact with other variables such as age and socio-cultural background or class, the language/gender interface is rather difficult to ascertain. It appears safe to assume, however, that mother-tongue education or multilingual educational programmes would not interfere in any negative way with the concern of establishing gender parity with regard to education in Africa.

There are several idealistic initiatives, publications and documents that relate education, the official use of mother tongues and – in particular – the use of mother tongue in education to the more general issue of human rights (see Bamgbose, 2000a for the following line of argument). Most nations have ratified the *Universal Declaration of Human Rights*, (United Nations, 1948) which has become a feature of the constitutions of many countries. Following this example, it has been suggested that a similar goal can be achieved by a declaration or charter of linguistic human rights, irrespective of obvious problems of implementation and enforcement that already make the *Universal Declaration of Human* Rights (United Nations, 1948) little more than a paper promise for most people around the world. A similar example, this time specifically on language policy, is the Organization of African Unity's (1986) *Language Plan of Action for Africa* which has remained an archival material to be quoted by scholars writing on language policy.

The fundamental ideas underlying these initiatives and documents emphasise non-discrimination, pluralism and community initiatives in language use and development (see also the *Universal Declaration on Cultural Diversity*, 2001). In particular, they involve the right to education in one's own language, respect for immigrants' rights and culture, equal rights for languages, rights to the use of one's language in communication, arts and culture, courts, legal instruments, business transactions, and so on, even the setting up of a World Commission on Linguistic Rights (Bamgbose, 2000a). See also the resolutions passed on the occasions of the international conferences of the Association for the Development of African Languages in Education, Science and Technology (ADALEST), held at Kisumu (2000), Hammanskraal/Pretoria (2002) and Mangochi (2004), and the *Asmara Declaration on African Languages and Literature* (2000).¹¹

Language as resource

In recent years, a new paradigm has gained ground among enlightened Africanists that no longer views African language as an end in itself. The new paradigm looks, first of all, at the speakers of language(s) and how they use (or do not use) language(s) as resource(s) in everyday life, and to the benefit or detriment of social, political, and economic development. The question is no longer what (socio-)linguists specialising on African languages can do for these languages,

¹¹ These documents can be found on the Internet; they have also been put together in print, with other relevant documents concerning the "African Renaissance", as appendices to the book Tied Tongues. The African Renaissance as a Challenge for Language Planning, ed. H. E. Wolff, 2003a.

but what these languages can do for their speakers and how linguists can assist in the process of the speakers' tapping into the resourcefulness of indigenous and foreign languages in order to promote socio-economic development, democracy and eradication of poverty.

First of all, multilingualism must not be viewed as if it were a "problem", but as a resource even in the narrow sense of an economic asset. Comparable to the energy sector with the introduction of innovative technologies regarding more sustainable resources such as the use of alternative energy generators such as sun, wind and water, the language sector provides rich potential for innovative and sustainable language industries. Even in very narrow terms of cost-benefit analysis for industrial production sites, language skills figure as factor.

Language and development communication

Development, development aid and intervention are about communication. They are cultural, perception- and communication-loaded, and not only a matter of material "inputs" (Childers, 1990, quoted in Robinson, 1996). Development projects require communication in order to be taken on by local people, and when they are sustained by the local people themselves they involve communication both within the local community and with outside sources (Robinson, 1996). Since human communication is largely through the use of language(s), linguistic issues become inseparable from issues related to development. There is yet another catch to the issue: "People in power know that language barriers help maintain the *status quo* and hinder development. Developers need to know that politicians know this and add language use as a variable in planning" (Eastman, 1990, as quoted in Robinson, 1996: 259).

However, bottom-up grassroots development based on free communication in the local language would provide serious problems for non-local agents of development with their top-down approach conveyed through the official and international language. According to Robinson (1996), and confirmed by the author's own observations, today's international experts hardly ever learn to use the local language or *lingua franca*. They remain non-competent in the local language, unwilling to learn it, and thus end up interacting only with those who speak their own (European) language. This automatically creates a bias towards those rural people whose language competence already gives them greater access to information and resources. From the point of view of development, therefore, a multilingual approach to education is called for in which both the official language and the relevant local language(s) – mother tongue or *lingua* *franca*/national language – must have their appropriate place and methods of teaching. In this way at least a majority of "local" people can have access to relevant information and resources in the course of development aid and intervention.

Wasting resources through bad educational policies

When we speak of wastage in the educational sector, we refer to at least three different unhappy consequences of wrong policies.

- First, there is wastage with regard to human resources, affecting thousands of students and teachers, hundreds of teacher trainers, administrators and supervisors, even decision-makers, who all waste time and effort on poor, ineffective and inefficient programmes.
- Second, there is economic wastage in terms of exorbitant financial resources, such as investment in infrastructure, i.e. building and maintenance of classrooms, teachers' and teacher trainers' salaries, bottle-neck effects in schools caused by class repeaters, low productivity of a poorly educated labour force, and scholarships and stipends for ill-prepared students in secondary and tertiary cycles.
- Third, wastage applies to mediocrity and poor performance of secondary school-leavers and academicians from tertiary institutions, who are taken in by the public sector and become responsible for ubiquitous inefficiency of bureaucracy, poor decision preparation and implementation monitoring and so on.

This all-encompassing wastage of resources that no one has ever calculated for individual African countries can be linked in a fairly straightforward way to wrong language-in-education policies and their effects in terms of underdevelopment and poverty.

Moderate re-indigenisation of education as a prerequisite for sustainable development in Africa

With regard to language-in-education policies, especially under the prevailing circumstances of historical particulars, there is no conceivable "either-or" approach to sustainable development for Africa that would meet the hopes and aspirations of a whole continent; one rather has to opt for "as well as"

approaches. The colonial experience, as much as the irrevocable presence of the ex-colonial languages in modern Africa, together with the irrefutable need for exploiting Africa's rich cultural and linguistic heritage for sustainable development and effective and efficient educational systems, all call for "moderate re-indigenisation" of what have been handed down until this day as "post- or neo-colonial educational systems". This has also been argued by several African scholars (for instance, Djité, 1993, 2008; Prah, 1995, 1997; Okombo, 2000) as well as the World Bank (1989, and 2005).

"The key issue in Africa's development efforts is how to benefit from both internal and external resources in a healthy, synergetic pooling of all valuable resources. Too much reliance on external resources fails because it often runs into counterproductive conflict with African realities; insistence on exclusively African resources is expensive and generates progress at a pace that is too slow to cope with the rapid development demands of modern Africa. Wisdom, it looks, lies in finding the golden mean – a nonantagonistic combination of indigenous and non-indigenous resources" (Okombo, 2000: 42).

"Can Africa's decline be reversed? The simple answer is yes. It can be and must be. The alternative is too awful to contemplate. But it must happen from within Africa. Like trees, countries cannot be made to grow by being pulled upward from the outside; they must grow from within, from their own roots. But Africa will need sustained and increased external support if it is to meet the challenge without unreasonable hardship" (World Bank, 1989: 194).

It is imperative to review current language-in-education policies in terms of general and public empowerment that will enable indigenous languages and their speakers to play their appropriately equal roles in the wider society. This will enable the exploitation of the resource potential of indigenous African languages for individual and societal development, and give them greater currency, not only in the respective African societies and economies, but also in a global perspective (by affirmatively linking the issue to internationalisation and globalisation). At the same time, this would be the political prerequisite for the economic development of national and international language industries that would create job opportunities for thousands of African language-speakers in designing, programming, manufacturing, selling and distributing human language technology (HLT) products specialised for African languages.

"Indeed, if handled properly, languages, like all other resources, have a jobcreating potential. In some countries, notably Australia, Canada, Belgium, Sweden, a language industry has been set up which caters for domestic as well as international linguistic needs. Thus, for instance, hundreds – and even thousands – of interpreters, translators, terminologists, lexicographers and other language practitioners and professionals have to be trained and employed in order to make the multilinguality work smoothly" (Alexander, 2003: 34).

Further, social stability and low crime rates are highly welcome corollaries of socalled developed societies; they are both prerequisites for and results of continuing (foreign) investment, steady economic growth and low unemployment rates. This, too, has to do with language and education in multilingual societies where one language dominates the other(s), be it immigrant societies in Europe or elsewhere, including most African countries (see Wolff, 2000b).

Designing language-in-education policies for Africa

"We should distinguish between knowing an international language as a second language and making an international language the internal official working language of the whole population at the expense of the native languages of the population. Even if English is the most international language it must be remarked that it is learnt by the majority of its speakers all over the world as a second language. This means that the majority of the people who speak an international language know at least two languages of which the native or national language is the first" (Mateene, 1980: 29).

The legitimate quest for access to the official language

One has to accept the fact that, in Africa and legitimately so, parents and students view access to and proficiency in the foreign/official language(s) as a primary target of formal education. Unaware of fundamental insights of evidence-based professional modern language pedagogy and didactics (Bamgbose 2003 speaks of "uninformed choices" by parents), they believe that early and lengthiest exposure to the foreign language is the best approach ("the longer the better", implying "the earlier the better") and ideally would like their children to begin

preschool or kindergarten education in the foreign/official language. Many best-willed parents undergo considerable sacrifices to send their children to private institutions that adhere to the foreign/official language medium. Changing such misguided and uninformed attitudes is a difficult task that calls for professional management of educational reforms and an integrated social marketing approach to educational policies.

Multilingual language-in-education policies for Africa must include the official language(s) of the country; it must not necessarily involve all mother tongues spoken in the country which as medium of instruction can be substituted by national languages and/or regional lingua francas, as long as the children are familiar with these languages upon school entry. Any failure to make provisions for proficiency in the official language(s) will jeopardise the multilingual approach, provoke unwanted suspicions, and lower the degree of acceptability and sustainability considerably.

Official language medium schools are in fact mother-tongue or dual media schools

Official English or French media classrooms, no matter at what level of schooling, are turned into de facto dual or trial media classrooms in everyday practice. In order to capture the attention of their pupils and create more interaction and active participation, or simply to get a particular point across, teachers abandon usage of the official language. They switch, temporarily or permanently, to a language that most, if not all, of the students master and share with the teacher – be it their mother tongue or a regional/national lingua franca. This routine practice by teachers is based on their professional or intuitive insight about enhanced learning in the mother tongue.

"With regard to pedagogical effectiveness, research shows that Lol [Language of Instruction] policies which favour mother tongues in the early years of basic education result in improved and faster acquisition of knowledge by pupils. Furthermore, mother tongue Lol instruction is effective in promoting the acquisition of second language competencies" (ADEA, 1996a: ii).

African languages in secondary and tertiary education

Empowerment of African languages through use in education cannot stop at the primary level where it is still and mostly seen as an necessary evil to be overcome as soon as possible by an early transition to the official language (so-called "early-exit models"). The moderate re-indigenisation of education through fully-implemented multilingual policies that is proposed herein must encompass all school levels – primary, secondary and tertiary.

"[U]niversities are essential to enhancing the status and intellectualisation of African languages. University leadership is necessary to dispel the widespread notions that serious discourse must be conducted in the colonial languages and that African languages are only adequate for the marketplace, the kitchen and informal social settings. Countering these notions cannot be left only to primary and secondary school teachers who are rarely prepared to intellectualize their languages, and have few incentives to do so. Instead it is up to universities, scholars, writers, critics and sometimes politicians and statesmen and women, that is, high status and high profile institutions and individuals, to validate to the wider public both the current and potential capacity of African languages to deal with complex social, scientific, professional and humanistic issues [...] The Asian experience indicates that individual scholarly 'champions' of teaching in the national language – often, and even especially, by individuals for whom it is not even their mother tongue – can powerfully shape new conceptualisations and curricula as well as mobilize other scholars and students to use the national language for academic and broadly intellectual purposes" (PRAESA, 2003: 10).

Language is not everything in education, but without language everything is nothing

Quality education can only be achieved through combination of the following four components: (a) appropriate medium of instruction (in mono- or multimedia systems); (b) culturally-adequate curricular content; (c) professionally-applied teaching methods; and (d) adequate financial and material resources. Special emphasis must be laid on adequate curriculum reforms, teaching methods (both in training of teachers and for teachers in class) and secure funding. Schools have to do more than teach reading, writing and arithmetic – pupils need to be educated to become independent and critical thinkers. The curriculum is the tool to achieve this objective and should be designed in such a way that what is learned in one year creates the step for what can be reached at the next. While some countries have "Africanised" their curricula by giving preference to indigenous languages and cultures, the actual changes to the subject matter are minimal.

Clearly, non-African institutions and publishers of textbooks, who barely know the indigenous languages and cultures to be taken into account, are unlikely to be in a position to meet the above-mentioned challenges for adequate curricular content. This establishes the demand for African publishers and insider curriculum planners and textbook experts to become involved, if not take over, curriculum planning and textbook production in Africa (see Chapters 7 and 8).

Where language policies tend to fail, and why

The neo-colonial impact on African governments and educational agencies impedes progress on the policy level and, in the light of a more independent national policy, the subsequent implementation of existing policies in favour of mother tongue or national language education. At times this takes the form of devout anticipatory obedience to the assumed "feelings" of potential international donors that one can find with African functionaries and public servants. Such an "invisible hand" conspiracy ranges "from a refusal to extend successful pilot projects to the national level, to a reduction in the number of school years or the number of subjects taught in the mother tongue; holding the language policy in a permanent climate of insecurity and sometimes ending with the total reversal of the language policy" (GTZ, 2003: 20).

Two major sets of factors conspire towards failures in policy formulation and implementation with regard to language in general, and language-in-education, in particular. The first set relates to negative attitudes towards African languages on the part of most stakeholders. These attitudes have been described above.

The second set of factors relates to poor policy planning and implementation, particularly the absence of comprehensive and integrated planning theories and implementation monitoring based on modern concepts of integrated social marketing (see Wolff, 2004). In several sharp-witted analyses of language policies in African countries, Bamgbose (e.g. 1990, and 2000a) has identified the major factors which lie at the bottom of the practically overall failure of language planning and implementation. He refers to them as avoidance, vagueness, arbitrariness, fluctuation and declaration without implementation. Failures in the language planning and implementation process in the African context can have various sources, which can be regrouped under the following two major headings.

Politics of language

This involves, first of all, the absence of the "political will" on the part of governments and political elites to question and change the status quo; this goes with the systematic lack of sanctions for non-compliance with existing policies, in combination with faulty planning and deficits of the implementation process.

Apart from their total lack of political will to initiate changes to the status quo, Africa's basically conservative governments and individual members of the ruling elites, as long as they identify with the dominance of Western culture and the imposed eurocentrism that comes with it, profit from an inherent weakness of most, if not all, language planning processes in the African context. The implementation of existing language policies or action plans is hardly ever enforceable. There are practically no sanctions for violations of linguistic rights, nor are there courts to which individuals or groups of people, associations, NGOs or any other representatives of civil society can appeal in order to stop the abuse of linguistic rights and non-compliance with constitutional stipulations (see Bamgbose, 2000a).

Material deficits

These pertain to both inadequate language development (corpus planning) and insufficient resource allocation with regard to teachers, teacher training, pedagogical materials, and general infrastructure.

Corpus planning (i.e., graphisation, standardisation, modernisation: "intellectualisation") in terms of lexical innovation (terminology), involves language-specific linguistic engineering, and thus is of technical interest to hardcore linguists and lexicographers. Important, rewarding and time-consuming though corpus planning may be, particularly with regard to acceptance and usage by the speakers, it is no longer a qualitative problem that would pose any major theoretical, methodological or technical problems for language planning. Rather, in a given language-planning situation, corpus planning may prove to be a quantitative challenge: how many languages can be engineered in a parallel fashion at the same time, how many skilled corpus planners are available, and so on, which means it is a question of resource allocation (cf. below).

Inadequacy of resources, in terms of availability of skilled teachers and adequate teacher training facilities, as well as of pedagogical materials for use in classrooms, may also lead to complete failure in implementing languageplanning programmes. The necessary allocation of funds for teacher training and production of materials is a question of national political priority and must be seen as such. The problems are neither theoretical, methodological, nor technical ones for language planners and implementers.

One of the most important lessons learned from case studies across Africa with regard to the planning and implementation process itself is the need for clear objectives in policy statements, including anticipation and formulation of stepby-step implementation procedures as integral parts of the comprehensive planning process. At the same time, it is necessary to create a political and sociocultural environment that is conducive to successful implementation. What is lacking is professional management (or marketing) of policies, which in the case of language and language-in-education policies falls under the relatively recent concept of "integrated social marketing".

Multilingual education escapes the "bedeviling dilemma" of language planning

Adegbija (2000) lucidly outlined the nature of a "bedevilling dilemma" that language and language-in-education planners feel confronted with when it comes to medium-of-education policy in Africa: no matter which decision is taken in favour of either the mother tongue/national language or the foreign/ official language, it will send out "wrong messages" (see Adegbija 2000: 316 f). As worldwide practice and experience has shown, if need arises, human beings tend to be functionally multilingual, in Africa as much as elsewhere in the world. The language and educational planner must accept multilingual answers to the language question, based on the specific sociolinguistic fabric of each country and society; there is no one-size-fits-all solution for Africa conceivable.

"It does seem that the question of a blanket, complete replacement of exogenous languages with indigenous ones seems, for now at least, to be totally out of the question in most African countries, especially in the area of higher education. The situation of each country has to be considered in its own merit. Thus, a policy of live and let-live in which both types of languages complement each other (rather than one replacing the other) at both the lower and higher levels of education has to be formulated and pursued in accordance with the sociolinguistic flora and fauna of each African country. One point seems indisputable, however, namely that both in the educational and other aspects of national life, African languages deserve a greater role and honour within their own territories and homebase than they are at the moment being accorded in most countries by

policy planners. Their present supposed inability to cope with the demand of modern life should [not] continue to be used as an excuse or pretext for their perpetual neglect or lack of development. [...] it seems evident that both exogenous languages and at least some African indigenous languages are required, and so should be used, at all levels of education. No doubt, exogenous languages already function disproportionately, actively, and at the moment in most African countries, in a *non-pareil* status in this domain, especially at the highest level of education. In order to begin to address or resolve the dilemma discussed in this paper, a grain of linguistic mustard seed faith in the future of the indigenous language[s] has to be sown now, if their development and growth for use in the educational domain, especially at the highest levels, is to be seen and established in the future. Only with the sowing of such a seed at the present can the African languages truly complement rather than be appendages to exogenous languages in the domain of education, as most of them presently seem to be. To do less is to continue, especially in the domain of higher education, to make African indigenous languages perpetually dependent on the linguistic crumbs falling from the tables of exogenous languages" (Adegbija, 2000: 326f).

Adegbija's vision of a shared burden approach that would make use of both mother tongue/national languages and foreign/official languages in education comes very close to the main line of arguments in the present chapter and throughout this whole volume. Yet one must point out a latent dangerous misconception that one finds hidden behind many advocacy statements for multilingual education which do not clearly spell out the highly relevant distinction between medium of instruction and subject of instruction. Even Adegbija's analysis and vision stops short of addressing a widespread fundamental misunderstanding that we have encountered again and again in the literature. This misunderstanding constantly confuses

- language learning in terms of access to the official language, and
- the totally independent question of the most adequate medium of instruction in terms of general access to knowledge and learning.

As a consequence of this widespread confusion, for a long time and to the present day, well-meaning parents and many members of the African elites prefer to send their children to (well-resourced private) schools with earliest possible, if not exclusive, exposure to the foreign/official language as medium of instruction (based on a "monolingual exoglossic model"). They continue, thereby, to send wrong signals to the "masses" of their compatriots with lasting damaging effect on the language-in-education question in national discourse. In short: learning the official language as a foreign language is a matter of professionally skilled instruction as subject of instruction; teaching how to learn, including learning a foreign language, is a matter of using a familiar medium of instruction, which ideally is the first language of the learners or a language already mastered well upon school entry.

Cases: Multilingual primary education in Ethiopia, Niger, Uganda and Zambia

The number of African governments that show an interest in making use of the obviously positive role of African languages in education is constantly increasing, although most governments appear to favour early-exit models that, as the present study shows, fall short of the expectations regarding their efficiency. Cases in point are, for instance, Uganda and Zambia. In other cases, new education policies remain on paper with little or no prospect of implementation. An instance of the latter is Niger, a country with a long-standing and largely positive experience of bilingual education. Bilingual education, however, remains within the ghetto of so-called experimental schools, one reason being that Niger, like other francophone African states, suffers from the persistent influence (called "*Francophonie*") of the former colonial power France, which – despite increasing considerations given to the notion of *diversité culturelle* – maintains a strong political grip on the members of the "francophone family of states".

ETHIOPIA radically changed its language policy in 1994, instigating the advocacy of multilingualism to the extent that originally 17 African languages, now 21, were introduced as medium of instruction in primary education (years one to six) next to Amharic, the former official language of the imperial period, and English. Vis à vis the rather elitist system of the past, the intentions of the 1994 language policy reform were to decrease linguistic problems and to increase children's access to primary education, in addition to improvement in literacy results and general academic achievement. A further target was to enhance the appreciation of local languages and cultures.

NIGER: Systematic bilingual experimentation began in 1973 with five different mother tongues used in the first three years and transition to French in year four. the first language remained a subject through year six. French is introduced after the second year, first orally and then in its written form. The bilingual classrooms were more stimulating, interactive, and relaxed. The majority of parents surveyed were in favour of early schooling in the mother tongue and wished to see national languages also used in other public contexts. Despite a decline due to unfavourable external conditions, the experimental schools have survived a difficult transition period between 1988 and 1998. Still, evaluations carried out in 1985 and 13 years later testify to the superiority of the combined mother-tongue and context sensitive curriculum (APP – activités pratiques et productives) approach: With regard to the final primary examination during the 1980-85 period, the success rate was 95 per cent, repetition of classes was down to two to three per cent, and the drop-out rate was only one per cent. The experimental schools are carrying on to date, but policy in Niger has not yet changed in response, other than on paper. It can be demonstrated that a significant factor in the failure to implement mother-tongue programmes is the reticence of the national political elite. The former "experimental schools" are now called "Bilingual French – National Language Schools". In 1998, a new education bill was passed, which adopts, in particular, the mother-tongue strategy along the following lines:

Table 1.4 National mother-tongue strategy of 1998 in Niger

| levels | age of entry | duration | medium of instruction | language as subject |
|----------------|--------------|------------|-----------------------|------------------------|
| pre-school | 3 - 5 | | | |
| basic level I | 6-7 | six years | MT | official language |
| basic level II | 11 – 13 | four years | official language | MT |

Unfortunately, this very progressive education bill foresees no steps for generalised implementation and, therefore, rests on paper; bilingual education in Niger remains in its "experimental" ghetto.

In a very recent study, Nekeman (2005) has reviewed three cases in Africa where multilingual primary education is indeed being implemented in a generalised fashion.

UGANDA's language policy changed in 1991-1992, resulting in the introduction of six African languages into primary education (years one to seven), in addition to Kiswahili (which is not a Ugandan language properly speaking, but a crossborder inter-African language of the sub-region) and English. On the whole, more than 30 mother tongues are being used across the country in primary education, albeit most of them only in the very early years. The rationale behind the new policy was primarily to use local languages in order to develop a sense of belonging to and pride in indigenous cultures, but also to improve literacy results and academic learning results in general, which had been rather poor under the English-only language policy of the past.

ZAMBIA implemented its new policy in 2002-2003 when the curriculum was adjusted and local languages were introduced into primary education, fostered by the success of the so-called Primary Reading Program. Subsequently, seven African languages were introduced as medium of instruction (years one to seven) in addition to English.

However, Uganda and Zambia still struggle with the domination of English in the educational system particularly with regard to textbook production and development of pedagogical materials. English also remains the main language of instruction at the level of Primary Teacher Colleges.

The three countries researched by Nekeman (2005) have achieved considerable progress in the implementation of multilingual programmes, catering for trilingual models where the use of local languages, a dominant national language and the official language (English) require this. However, severe problems with regard to teacher training and provision of materials and textbooks in the African languages remain.

Recommendations

African governments and organisations that are active in the field of education must:

- a. acknowledge the fact that underdevelopment and poverty in Africa are intimately linked to the language factor, which plays a decisive role for the success or failure of development communication, which again is closely linked to the language factor in education;
- b. take notice that evidence-based reviews and analyses of the background and history of language politics and language planning in Africa, particularly language planning for education, unequivocally advocate comprehensive social planning. This must be based on politics of language that reflect the multilingual and multicultural heritage of the people planned for, and guided by clear vision for a free and democratic society; and
- c. view education as a societal project that aims for sustained economic and socio-political development framed in a broader context of social engineering that is facilitated by socio-culturally adequate language and education policies and practice.

In order to reach or at least progress towards the Millennium Development Goal of Universal Primary Education (UPE) by 2015, African governments must:

- d. design and implement national language policies immediately, if they have not done so already, particularly with regard to language-in-education, based on the available scientific evidence regarding multilingual strategies to secure quality education;
- e. start serious implementation immediately, if they have such language policies in place but have so far failed to implement them in any serious manner;
- f. not only put multilingual educational systems in place, but also manage them efficiently and effectively; and

g. attempt to change the language attitudes virulent among stakeholders, in the ranks of the African "elites" and among the "masses" as much as among expatriate advisors to African governments.

Attitudes must be shifted

- h. towards accepting multilingualism in Africa as an asset and resource;
- i. away from overestimating the role of the official/foreign language as a tool for learning and teaching; and
- j. towards a positive recognition of the value and significance of African languages for progress and development in Africa in general, and for education in particular.

Depending on the sociolinguistic profile of the catchment area of the school/ university, the national educational system must

- k. use African mother tongues/national languages in all cycles of the threestage formal education system (primary, secondary and tertiary). In order to achieve maximal learning success, the mother tongue / national language (a) must serve across the curriculum as exclusive medium of instruction in earlier years for as long as possible and give way to the official language as medium of instruction as late as possible in the three-stage system and for certain subject matters only; and (b) must be retained as subject throughout the whole system; and
- I. be flexible to offer trilingual additive systems in place of bilingual additive systems where need arises, in order to accommodate (a) the universal needs for the first language as medium of instruction, (b) access to and proficiency in the official/foreign language ($L2_1 = Sol$), but also (c) access to and proficiency in a national language of wider communication/cross-border communication ($L2_2 = Sol$). This is particularly necessary where the first language is not a language of wider regional or national distribution.

The result of successful implementation of models based on the above recommendations would be characterised by the following desirable features:

m. Quality education is secured through maximal learning through a familiar language.

- n. Optimal access to the official language is secured through adequate pedagogy and didactics and through teaching by specially-trained teachers.
- o. The African/national languages used in all cycles of education become increasingly intellectualised and empowered; they obtain high prestige and status as true "national" languages equal to the official language, at least in terms of their educational value.
- p. Such systems would be the most effective in terms of educational output as well as the most efficient in terms of cost-benefit relations.
- q. Such systems would allow for maximal social mobility, full democratic participation and generally high standards of education.
- r. Such systems would answer to the expressed wishes of most, if not all stakeholders.

Further, such systems should not be trapped in a false dilemma of choice between the official language and the African/national languages as medium of instruction. Rather, they should reconcile conflicting "pulls" stemming from serious concerns regarding identity factors of the human condition (which appear to emphasise the role of the indigenous languages), and the rationale of the attractiveness of the "window-on-the-world"/globalisation perspectives (which appear to emphasise the role of the foreign/official and any other foreign language).

In sum, such systems would answer to most, if not all, fundamental needs of sustained democratic, socio-cultural, socio-political, and socio-economic "development" for Africa and would be a decisive major factor in overcoming poverty. What more could one expect from an educational system? Chapter 2

Theory and practice – language education models in Africa: research, design, decision-making and outcomes

Kathleen Heugh¹

"In multilingual societies, the choice of language of instruction and language policy in schools is critical for effective learning" (EFA, 2005: 160).

This chapter will show what the research tells us about different types of literacy and language education models which are used to implement language education policy. It will show a historical progression of emerging language education models used in Africa. The models will be analysed in terms of their design features and their potential outcomes. Finally, the chapter points the way toward improving the design and implementation of language models which can better serve children in the African continent and, by so doing, serve the interests of governments, economies and society at large.

A baffling phenomenon, debated at length by countless education and language scholars in Africa and beyond, is the continued use in Africa of language models that cannot offer students meaningful access to quality education. These models have failed the majority of those children who have had access to school systems since the Berlin Conference of 1884-5 allocated control over the continent to the colonial powers. They have succeeded only in providing successful formal

¹ The author gratefully acknowledges the helpful comments of many people, particularly those of Hassana Alidou, Birgit Brock-Utne, Aliou Boly, Ekkehard Wolff, Blasius Chiatoh, Marie Chatry-Komarek, Peter Plüddemann, Carol Benson, Denis Malone, Susan Malone and Christine Glanz.

education for a small percentage of children, yet they continue to be used as if they could offer lasting educational success for the majority. This is problematic for several reasons. The models have never demonstrated a positive return on investment in educational, social, economic or development terms despite the significant financial and donor resources which have been funneled into these education systems.

Bernard Spolsky (2004) contributed a valuable and new insight into the discussions about language policy implementation internationally which has particular relevance to sub-Saharan Africa. Spolsky draws attention to the responsibility which the advisors and 'experts' must accept with regard to the application of the wrong policies in education. The implementation of policies which do not work is usually blamed on governments or ruling elites but, as Spolsky points out, allocating all the blame to governments is counter-productive and not entirely correct. Lily Wong-Fillmore (2004), in a related discussion, argued that one of the reasons that the advocates of bilingual education have not been successful in the USA is that they have been advocating the wrong or inadequate theories of second language acquisition. In yet another significant body of research on second language acquisition, several authors show that much of the research on second language acquisition has been seriously flawed or misinterpreted (see, for example, several chapters in Doughty and Long, 2003). There are significant gaps in the research, the most pertinent of which is that the international literature is not informed by data and evidence from research on second language acquisition in African contexts.

For these reasons we, the experts who offer advice to governments, need to be quite sure that we have kept abreast of the research in the field. We need to understand second language acquisition in international contexts and how this relates to circumstances in multilingual African settings. We need to be continually sensitive to new evidence which requires changes and adaptations to the theoretical underpinnings, design and methodologies of programmes that we advance. Part of this endeavour is to keep informed about the implications of research not only in but also beyond Africa, and weigh this judiciously. What we know of the research today is substantially different from what we knew in 1955, 1985 or 1995. This publication contains a critical appraisal of the evidence available up to 2005, the point at which the study on mother-tongue and bilingual education was undertaken. It also includes some updates of findings from subsequent research. Readers should expect that new evidence will emerge over time to refine or alter the analyses. Such a natural historical process requires adjustments in thinking and evaluating. On-going reliable and valid monitoring and evaluation of programme are essential if governments are to be advised wisely.

Components of language education models

African language plus an international language of wider communication

A series of educational commissions of enquiry and reports, beginning with the United Missionary Conference in Kenya in 1909, and including the 1953 UNESCO Report on the Use of the Vernacular Languages in Education, have been undertaken in Africa. Each of these has recommended the use of the mother tongue as the primary medium of education, and for at least the first few years of primary school. They have been followed by numerous other reports and even resolutions of ministers of education and heads of state, such as the Organisation of African Unity's Language Plan of Action for Africa (OAU, 1986, Mateene, 1999) and the Asmara Declaration of 2000 (see Blommaert, 2001).² More precisely, what these commissions and reports on education in Africa have advocated for 100 years is the use of the first language (L1) home language/ mother tongue³ as both a medium of instruction and a subject of learning in school. Seldom, if ever, has there ever been a suggestion in these reports that the first language/mother tongue is sufficient or that children should be limited only to the first language. The first language/mother tongue is always advanced alongside the principle of additional second language (L2)⁴ education, both as subjects from early on and, later, as an additional medium of learning and teaching. In other words, there has been consensus at least on the use of initial mother-tongue education followed by the addition of an international

² See Chapter 1 in this volume for complete list of these.

³ The terms home language, mother tongue and first language (L1) are used interchangeably in this chapter. They are also used in a broad sense to mean, in the case of multilingual children, the language/s which the child knows best upon entering formal education. It may be the language/s of the wider community and it may be a variety closely related to, but not identical with, a formal variety more commonly used in a school setting. This is not unusual in other settings (e.g. Swiss German = L1, but standard German = L1 for school purposes; Australian English – standard International English, etc). The mother tongue in Africa is often a multilingual repertoire rather than a single language variety.

⁴ Even though many children are already multilingual, the L2 is used here to denote the L2 for educational purposes, and this is usually a language other than any of the child's existing spoken repertoire of languages.

language of wider communication (ILWC)⁵, inevitably the language of the respective colonial power.

There is consensus in the recommendations about:

- a need for further development and use of African languages in education systems across the continent, and
- the better provision of and teaching of an international language of wider communication in each case.

Consensus does not yet exist on:

- The point at which the medium should change from mother tongue to international language of wider communication;
- Whether a change in medium is necessary if the international language of wider communication is taught efficiently as a subject;
- Whether it is possible to use both mother tongue and international language of wider communication as complementary mediums of instruction throughout the school system.

An additional factor considered within education commissions and reports is the role of powerful regional lingua francas, or national languages of wider communication vis à vis smaller local languages and the international language of wider communication. Different responses to this situation have emerged as follows:

- Where there is no obvious large regional language, a two-language or bilingual model, L1-ILWC, is regarded as sufficient;
- Where there are both multiple local languages and one or more significantly used regional lingua francas, a three-language model has been recommended: L1-regional lingua franca/NLWC-ILWC; Nigeria, with three powerful regional (national) languages, has opted for the three-language model; and Ethiopia has opted for this model since 1994;

5 ILWC is used to avoid the cumbersome repetitive use of 'former colonial language'. It denotes an acknowledgement of the desire to participate in international debates and concerns.

 An alternative response is a two-language model: (regional/national lingua franca) NLWC-ILWC (the smaller, minority languages are not included); Tanzania, Somalia, Ethiopia (before 1994) and Botswana have followed this approach.

The key issue at stake, and common across all situations, is the extent of the role of African languages in these two (bilingual) or three (trilingual) language models. Influential authorities in the domain of education (government, education departments, international donors, private sector interests, external advisors and even some academics), however, often misunderstand or misrepresent the African language-plus-international language of wider communication recommendations. As a result, there is enormous pressure to move from bilingual or trilingual models to monolingual models using the international language of wider communication only. In many countries, particularly in the former francophone and lusophone countries, bilingual models were until recently simply not used at all, and monolingual, straightfor-ILWC, models were favoured.

Several scholars have provided typologies of language education policies and models in African settings, which move away from mother-tongue education towards international language of wider communication/second language models and demonstrate that most are ineffective/inefficient/counter-productive (Obanya, 1999a, b; Bamgbose, 2000a; Ouane, 2003; Wolff, 2004). There have also been literally hundreds of studies that investigate the efficacy of second language systems versus mother-tongue education systems. The research, African (e.g. Macdonald, 1990; Bamgbose, 2000a) and international (Ramirez *et al.*, 1991; Thomas and Collier, 1997 and 2002), shows policy-makers that subtractive (straight for L2/ILWC) and early transition to second language programmes do not facilitate successful results. While there may appear to be an initial improvement in well-resourced programmes, this tends to disappear by about the fourth to fifth year of school. Thereafter, very few students show positive signs of achievement.

There is, on the other hand, research (e.g. Malherbe, 1943; Afolayan, 1984; Bamgbose, 1984a, 2000a, 2004b; Heugh, 2002) which shows the advantages of extended use of mother-tongue education plus the second language (late-exit transition and additive / strong bilingual models).

Variations in the extent of African language use in the models

Identifying the level of use of African languages as medium of instruction

The development of African languages for use in formal education has been uneven across the continent (Ouane, 2003; see Wolff, Chapter 1). Bamgbose (2004a) has developed a typology of the use/non-use of African languages as medium of instruction, showing a list of countries where African languages have been, or not been, used.

Over the course of the last century there have been changes reflecting both a decreased use of African languages in some systems and an increased use of African languages in others. Bamgbose (2004b) points also to these changes, as well as fluctuations of use. There are significant variations which apply at the level of early primary, full primary and secondary school systems.

Variations of use at different levels

Development and use of a single African language for literacy development and as medium of instruction

Countries like Botswana (Setswana), Swaziland (SiSwati) and Malawi (Chichewa until a language policy change in early 2000s) have concentrated on only one African language for literacy development and as medium of instruction for part of the primary phase.

In Tanzania and Somalia, investment has only been made in one African language (Kiswahili and Somali) for use through to the end of the primary phase. In Nigeria this was limited to Yoruba in the Six Year Primary Project. In Ethiopia, the practice until the 1994 was to use only Amharic, and to a limited extent, Afan Oromo. Malagasy has been developed for use to the end of primary school in Madagascar, but its use is discontinued or reintroduced depending upon the government of the day.

The selection of one African language in preference to others has usually been contested, however, because minority language communities believe that their interests have been marginalised in the process. The contestation has increased recently, notably in Botswana (see Nyati-Ramahobo, 1999) and in Ethiopia, resulting in a multilingual education policy from 1994 onwards.

Development and use of several African languages for literacy development and as medium of instruction

In most of the former British colonies, the missionaries developed several African languages in order to teach literacy and for use as medium of instruction for the first three or four, and sometimes six, years of primary school. This principle was extended by the apartheid government in both South Africa and Namibia to the end of primary school (i.e. to end of eighth year) between 1955-1976. In Guinea Conakry, Sékou Touré introduced mother-tongue education in eight (later reduced to six) local languages for eight years of schooling (1966-1984). The most significant, recent, developmental use of multiple mother tongues in education has been in Ethiopia since 1994. Within ten years, no less than 22 Ethiopian languages had been developed for use for six to eight years of primary schooling, and further development of another 12 languages was undertaken for use in early primary schooling.⁶

Decreasing use of African languages as medium of instruction⁷

Decreasing use of African languages as medium of instruction is most evident after independence in several anglophone countries, where various missionary groups had played a significant role in advancing African languages for literacy and as medium of instruction for at least three to four years of primary school. Decisions at independence made in the interests of fostering national unity and avoiding potential ethnolinguistic rivalry has reduced the role of African languages, often entirely. This is most notable in Zambia, and to a lesser extent in Botswana, Malawi, Namibia, Swaziland, and Zimbabwe. Ghana is another example, but this is also one where there are dramatic fluctuations of policy. There have been two stages of decreasing use of African languages in South Africa: from eight to four years during the second phase of apartheid education 1977-1993; and from four to three years after the new democratic government introduced curriculum changes in 1997. There has also been a decrease of use of African languages in the Democratic Republic of Congo, a formerly francophone country (Bamgbose, 2004a).

Increasing use of (limited) African languages for literacy and as medium of instruction⁸

Some countries, like Mozambique, have moved from zero to some accommodation of African languages in education. A Portuguese-only model was used in the

⁶ Similar policy intentions in Eritrea have been slowed down owing to internal political and economic complexities.

⁷ Adapted from Bamgbose 2004b.

⁸ Adapted from Bamgbose 2004b.

formal system until 2003. Several years of experimental bilingual programmes, sponsored by development agencies from northern Europe, have assisted a change towards greater accommodation of local languages (see Benson, 2000). The new approach is to use mother-tongue education to the end of year three with a switch to Portuguese thereafter. Change in Malawian language policy in 1996 has brought about the need to accommodate languages other than Chichewa as medium of instruction. Now, other significant languages like Chiyao, Chitumbuka, Chilomwe and Chisena have been added. However, whereas Chichewa was formerly used as medium of instruction to the end of the fourth year⁹, curriculum reform following on from the policy change restricts mother-tongue education to one to two years with transition to English in the second year. So there is an increase in the number of African languages used in the system, but a diminished period of time for use, from four to two years in the case of Chichewa.

In another example, recent policy changes have marginally restored the early use of African languages in Zambian education. Before independence several languages were used for four years (up to six years at times during first half of 20th century) in early primary and then entirely dropped in favour of English from 1966-1996. African languages are now used for initial literacy in the first year, but the medium of instruction remains English even in year one (Muyeeba, 2004). Similarly, in Botswana, although Setswana was used as the medium of instruction for the first four years of school until 1994, this has now been almost entirely eliminated. Mathematics and science are taught through English from the first year, and all other subjects except Setswana are taught through English from the second year (Arua *et al.*, 2005).

Several francophone countries, which initially excluded African languages in education, have also begun to introduce African languages in the first one or two years of school and in a number of instances there have been experimental programmes (e.g. in Niger which show signs of being taken up across the education system). Perhaps the most impressive have been the developments in Mali, where experimental programmes for three years from the late 1980s and 1990s (pédagogie convergente) have recently been inclining towards later transition to French. There is also a gradual and systematic developmental programme in Burkina Faso in which mother tongue education is being extended through primary and into junior secondary school (see Ilboudo and Nikièma, 2010; see also Chapters 3 and 4).

⁹ In Malawi each year is known as 'Standard', thus the 4th year would be 'Standard 4'

Fluctuating use of African languages as medium of instruction

Both Bamgbose (1991, 2004b) and Komarek (1997) draw attention to the fluctuating use of African languages in education in some countries.

"A closer look at all ...countries where MTT [mother-tongue teaching] is not allowed or reduced to the very first years of primary education or confined to just primary education leads to the same result: MTT is stagnant or even threatened not because of educational or technical considerations, not because of major technical or financial problems but because it is used as a pawn in the struggle for political power [...] between the elite and the counter elite" (Komarek 1997: 2).

(See also Wolff, Chapter 1 in this volume.)

Clarifying terminology used to identify language models in Africa

In this section the models which are most commonly used in African settings are discussed using terminology which is currently in use in the international literature. However, because this terminology is often misunderstood or used in different ways by education planners and advisors, it will be clarified here.

Subtractive and transitional (bilingual) education – weak bilingual models

Target: one-language, the second language

Subtractive models:

The objective of a subtractive model is to move the learners from the home language/first language and into the second language as a medium of learning as early as possible. Sometimes this involves a *straight-for-second language* as medium of instruction from the first year in school. Sometimes it does make a little provision for remedial work in the second language. The bottom line is the use of second language mainly or only for teaching and learning. It is sometimes referred to as the *submersion model* which literally means that the child is submerged in the second language which leads to a 'survival of the fittest' or 'sink or swim' scenario.¹⁰

10 Most sink.

Transition models:

These have the same end goal/objective as subtractive bilingual models –a single target language at the end of school; and the target is the second language. The learners may begin school in the first language and then gradually move towards the second language as the medium of instruction. If the transition (switch) to the second language takes place within one to three years in well-resouced contexts (one to four years in poorly-resourced contexts), we call this an *early-exit (from the first language) transition model*. If the transition is delayed to year five or six, we call this a *late-exit (from the first language) transition model*.¹¹

Weak bilingual models:

Some authors (e.g. Garcia and Baker, 1996; Baker, 2002) prefer to use the term 'weak bilingual' when referring to subtractive and early-exit transitional models. It does not matter which of the terms are used, but for the sake of clarity: *Subtractive* + *early-exit transitional bilingual models* = *weak bilingual models*.

Additive (bilingual) education – strong bilingual models

Target: two or more languages, the first and second languages

The target is either first language medium of instruction throughout (with the second language taught well as a subject) or first language plus second language as two (dual) languages of learning/media of instruction to the end of school. The first language is never removed as a medium. Therefore the target is high-level proficiency in the first language plus high-level proficiency in the second language.

The kind of additive bilingual models which are applicable in most African countries would be:

1. First language as medium of instruction throughout with the second language taught as a subject by a specialist teacher.

¹¹ Ramirez *et al.* (1991) refer to early-exit models as those where learners switch from the mother tongue to L2 any time between year one and the end of year two; and late-exit models as those where the L1 is retained for at least 40-45 per cent of teaching time to the end of year six, in the US. In African countries where the L2 is hardly known or heard outside of the metropolitan centres, an early-exit model applies to a situation where the child is switched from L1 to L2 any time before or at the beginning of the year four. Second language acquisition (SLA) research shows us that it takes at least six years to learn enough L2 to learn through the L2. Thus transition to the L2 as medium between year five and six is late-exit transition. But in Africa, because of generally poorly resourced learning conditions in most countries, optimal provision of SLA to the end of year six is unlikely. Therefore six years of L2 learning may not be enough to facilitate successful transition to L2 medium education.

Dual medium: first language mainly for at least four or five (preferably six) 2. years; followed by gradual use of the second language for up to but not more than 50 per cent of the school day or not more than 50 per cent of school subjects by the end of school.

Strong bilingual models:

Some authors (e.g. Garcia and Baker, 1996; Baker, 2002) prefer to use the term 'strong bilingual' models/programmes.

Additive bilingual models = strong bilingual models/programmes

Tables 2.1 – 2.3 below illustrate different examples of additive bilingual models.

Table 2.1

Multilingual countries with no obvious national language of wider communication

| Year | Teaching time per language and activity | | | |
|------|---|--|---|--|
| | % of L1 as subject and Mol | % of L2 (ILWC) as subject and MoI | Optional extra: % of L3 as subject and/or Mol | |
| 1-2 | 90%: literacy and numeracy | 10%: mainly oral | | |
| 3-4 | 80%: literacy development | 15-20%: oral and literacy | 5%: oral and literacy | |
| 5 | 70%: especially for Mathematics, Science, strengthen L1 literacy, and L1 as a subject | 20-30%: literacy, and as a subject; can also be used as Mol for: Sport/Music/ Art | 10% | |
| 6 | 60%: Mathematics and Science; and either Geography or History, strengthen academic literacy and L1 as subject | 30-40%: literacy and as a subject; and can be used as MoI for Sport/ Music/ Art & History or Geography | 10% | |
| 7-12 | 45-50%: For Mathematics, Science, etc, strengthen academic literacy and L1 as subject | 40-50%: build academic literacy and as a subject, and can be used as Mol for Sport, History, Geography, etc. | 10-15% as subject, and maybe used as Mol in Art or another subject | |

Mol = Medium of instruction

L1 = First language L2 = Second language ILWC = International language of wider communication

L₃ = Third language

Table 2.2Multilingual countries with strong national language of wider communication

| Year | Teaching time per language and activity | | | |
|--------|--|---|--|--|
| | % of L1 as subject and Mol | % of L2 (NLWC) as subject and MoI | Optional extra: % of L3 (ILWC) as subject and/or Mol | |
| 1-2 | 80%: literacy & numeracy | 20%: mainly oral | | |
| 3-4 | 70% | 30%: oral; literacy and numeracy | | |
| 5 | 50% and literacy development | 40% | 10% | |
| 6-7* | 40% and literacy development | NLWC 40% | 20% | |
| 8-12** | ± 35% strengthen academic literacy and L1 as subject | ± 35%, and academic literacy development | 30%, and academic literacy development | |

* Elsewhere we argue that L1 should be retained for 50 per cent of the teaching day. However, when a third language is brought into the equation adjustments should be made. The L1 will continue to be used for at least half of the time across the rest of the curriculum.

** The significant switch to or use of the NLWC is justified at this point because it is a language widely used in the region and is thus more accessible to learners than a "foreign language"/ILWC.

L1 = First language L2 = Second language L3 = Third language Mol = Medium of instruction NLWC = National language of wider communication ILWC = International language of wider communication

Table 2.3

African language / mother-tongue education throughout with strong second language teaching as a subject – 2 possible versions

| Year | Teaching time per language and activity | | | |
|--------------------------------|---|--------------------------------------|--|--|
| | % of L1 as subject and Mol | % of L2 (NLWC) as subject and Mol | Optional extra: % of L3 (ILWC) as subject and/or Mol | |
| Model A : 1-12 | 80% | 20% | | |
| Model B: 1-4 5-12 | 80% 65-70% | 10% 10-15% | 10% 15-20% | |

L1 = First language L2 = Second language L3 = Third language MoI = Medium of instruction NLWC = National language of wider communication ILWC = International language of wider communication

Convergence towards early-exit transitional models in Africa

The practice since European colonisation in the francophone and lusophone countries has been characterised by models which use 'straight for', or 'submersion' into, the international language of wider communication. This is known as a subtractive language education model because the first language is taken out of the formal school system as a medium of learning and teaching. The use of African languages in mainstream state education systems has tended to be negligible. Where there have been experimental bilingual programmes, these have usually been based on early-exit models where children begin school in their home language or language of the immediate community, followed by a rapid switch or transition to French or Portuguese within a year or two, occasionally by year three¹² (See, for example PROPELCA in Cameroon discussed in Chapters 3, 4 and 5 in this volume; and also Alidou and Maman, 2003).

12 A recent exception has been a late transition model in Mali (see Chapter 4).

In contrast, the practice introduced by missionaries in the anglophone countries, was inevitably the first language for the first three to four years followed by English. In some parts of Southern Africa the missionaries developed and used African languages for up to six years of school (e.g. Zambia and parts of South Africa). This is known as a transitional model: transition from mother tongue to English. Increasingly the tendency in the francophone countries and lately also in Mozambique has been to replace the subtractive (straight for French or Portuguese) model with a transitional model: one or two and, in the case of Mozambique, three, years of mother tongue followed by transition to French or Portuguese medium education.

There has also, since independence, been a converse trend in several anglophone countries away from transitional models employing four or more years of mother-tongue education followed by a switch to a language of wider communication. This results in a diminished use of local languages. Transitional programmes with an earlier exit point from mother-tongue education to international language of wider communication (one to three years of mothertongue education) or subtractive models (zero mother-tongue education) have been or are being established in anglophone countries. In the years immediately after independence, Zambia, Zimbabwe and Namibia embarked on a dramatic reduction of the use of early mother-tongue education. This has been most dramatic and resilient in Zambia where the four years of mother-tongue education were replaced by a straight-for-English (subtractive) model which continued for over 30 years. Recommendations for a return to mother-tongue education for four years were rejected in two policy reforms, in 1977 and 1996. A recent change in language policy has resulted in a continuation of the Englishonly medium but with minimal accommodation of initial first language literacy. However, English has been retained as the medium of instruction for the rest of the curriculum, even in the first year of primary school (Muyeeba, 2004). Within a few years of independence both Zimbabwe and Namibia settled on an earlyexit transitional model (early-exit to English by end of year three). To a large extent, then, there has been convergence towards an early-exit transitional model of education. There are several exceptions to this trend and these are discussed below (and in Chapters 4 and 5 in this volume).

Summarising language learning/acquisition theory¹³

Language and learning

Children come into school proficient in at least one and often several languages used in their immediate community. They have learned to use these languages for effective communication in mainly informal contexts. What is expected in the school setting, in most parts of the world, is that:

- Learners' language skills and expertise in their home language will be further developed for use in formal academic contexts. This includes, especially, reading and writing (literacy) for creative and cognitively challenging purposes.
- Learners' thinking (cognitive) skills will be enhanced through the range of challenges across the curriculum, including the development of high levels of literacy for comprehension of and engagement with academic and educational texts.
- As the curriculum becomes progressively challenging through the school system, so too do the literacy and linguistic requirements. Students need to continue to develop their literacy and language expertise in order to meet the ever-increasing challenges of the formal curriculum.
- Literacy development and language learning do not only take place in the language subject class; they occur (or should occur) in every lesson and every subject of the day. Language and literacy development, therefore, needs to be enhanced across the curriculum. This requires direct and explicit attention from all teachers, not only language subject teachers.

In African countries, we have come to believe that we should expect our children to do all of this, through a language they do not understand.

Although many people believe that the sooner a child is exposed to a new language in the classroom, the better s/he will learn the language, we now know from comprehensive research that this is not necessary and it will usually

¹³ Garcia and Baker (1996), Baker (2002) and Dutcher and Tucker (1995) provide excellent summaries of research.

have the opposite effect.¹⁴ If a child needs to learn a new language, such as the official language/international language of wider communication, s/he will normally need six to eight years of learning this language as a subject before it can be used as a medium of instruction. One cannot expect a child to begin learning a new language as a subject and to use this as a medium of instruction at the same time. If one tries to hurry the process, the child will learn neither the new language well enough nor the other important subjects of the school curriculum. We now know that most children who have to try to learn mathematics and science through a language they do not know will not manage to understand the concepts or the explanations of these concepts. This means that students fall further and further behind their peers who benefit from mother-tongue education.

We also know from the available research in Africa that there are three ways in which children can learn an additional language successfully and succeed in their other subjects in formal educational contexts. These occur in the following types of bilingual/multilingual programmes:

- Mother-tongue education throughout primary and secondary education, where learners have the mother tongue as medium of instruction throughout and good provision of the additional language taught by expert teachers. (First language speakers of Afrikaans in South Africa have become highly proficient in English, i.e. they achieve high levels of bilingual proficiency, where English is taught only as a subject for one lesson per day.)
- Additive bilingual education, where there is mother-tongue medium for at least six to eight years, plus good provision of the additional language taught by expert teachers during these six to eight years; followed by dualmedium education (some subjects in the mother-tongue medium; some subjects in the additional language/second language in years 8-12).
- *Very late-exit transition to second language*. Earlier experiences in South Africa show that the transition to English in the ninth year (a very late-exit to English) can be successful if those students have eight years of mother-

¹⁴ Children pick up accents and simple everyday communicative vocabulary very easily and quickly. Many authors, especially in the work of Stephen Krashen and Jim Cummins for the last 20 years, and authors in Doughty and Long (2003) show that young children's apparent aptitude for learning the second language quickly is widely misunderstood. They learn simple conversational skills very quickly, in one to two years. But they do not develop the necessary proficiency in the complex decontextualised discourse of educational subject material in fewer than six years.

tongue education with competent teaching of a second language during this time. Students from poor and disadvantaged backgrounds who went through this process between 1955 and 1976 achieved high success rates in English language achievement and in other areas of the curriculum.

Literacy development and medium of instruction

Many authors include literacy in their discussions of language development. However, language specialists, this author included, often take for granted that other education specialists understand the link between literacy and language development in education. We may not have made the implications of literacy development for high-level educational purposes sufficiently transparent to educators who specialise in other areas. Similarly, early literacy specialists may not have paid sufficient attention to literacy development for high-level cognitive functions beyond early childhood education (i.e. as required in most education systems from year four onwards). Thus, a brief discussion is presented here.

Literacy development is closely connected to language development. It needs to be emphasised that for most children in Africa, formal exposure to literacy occurs at the beginning of the first year of school. The usual pattern of school literacy teaching and learning is that pupils are taught to read simple stories (narratives) in the first three years of school. These stories are characterised by high levels of predictability, and are usually written in a familiar genre. Children at this stage learn to 'decode' the written symbols on a page and are in the process of 'learning to read' (Pretorius, 2002; Pretorius and Ribbens, 2005). Engaging in other learning activities in the first three years of school involves few or limited reading and writing tasks. In multilingual societies, it is common for children to be introduced to initial literacy in a second language at least by the second year of primary schooling. Again, this is in the context of decoding letters of the alphabet, simple vocabulary and simple sentences used in familiar narratives or for number-counting exercises. However, from the beginning of the fourth year, the curriculum usually requires a rapid escalation of reading activities involving increasingly unfamiliar text, contexts, discourse and genres. Pupils are expected to shift from decoding simple narratives and 'learning to read', to 'reading in order to learn' (Pretorius, 2002; Pretorius and Ribbens, 2005). In other words, students have to negotiate a cognitive leap from decoding familiar words in a text with a familiar predictable story-line to comprehending and interpreting texts involving unfamiliar concepts and unexpected outcomes (in mathematics, history, geography and science). Pupils

have to use their reading or literacy skills in order to understand what they need to learn.

This involves a significant cognitive challenge for most children when it happens in the mother tongue. Children who continue in mother-tongue education programmes have a linguistic store of 7,000 or more words and a sophisticated knowledge of the structure of language (e.g. compound and complex sentences which can be altered by qualifying and modifying phrases and clauses). They know how to use various techniques to adjust their register or variety, depending on the context and function of their communication. They may not have learned to read all of the language items and structures they know how to use orally, but they have an extensive reservoir from which to draw.

If children have to jump from first language literacy (decoding and simple narratives) to second language medium of instruction, even if they have had a year or two of early literacy exposure to rudimentary second language narratives, the cognitive distance is simply too far for the majority of learners. Most will 'sink', few will be able to 'swim' under such circumstances. South African speakers of African languages have about 500 words in English and enough early literacy skills in the second language to read simple three to seven word sentences (usually in the simple present tense) by the end of year three. They cannot squeeze all the knowledge and experience of the world they have in their home language/s into the limited 500-word vocabulary they know in English. Similarly, what is required of their understanding of the world in the curriculum at this point cannot be squeezed into or out of the impoverished second language linguistic pot through which they are expected to filter the whole curriculum. It needs to be emphasised that in many countries learners are still expected to switch to the second language even earlier than year three. What happens in the classroom where there is an early transition to the second language as medium of instruction is a reliance on the teacher's and learner's spoken language and rote-learning. Teachers will be obliged to use explanations in the mother tongue (code-switching) and limit their questions in the second language to those of 'low-order' cognitive value (see Chapter 3). For a while, classroom observations may reveal superficial spoken conversational language proficiency in the second language. This, however, is not matched by grade-level reading and writing proficiencies in the diverse subject areas of the curriculum from about year four onwards. It becomes a matter of time before the learner can simply no longer cope with the requirements of formal education and repeater and attrition rates escalate.

The exceptions to the rule

Internationally-acknowledged exceptions to this pattern of literacy and language development involve French or Spanish immersion programmes for middle-class children from wealthy or professional, usually English-speaking, homes in Canada and the USA. For a few years during the late 1970s to the early 1990s, the Canadian Immersion programmes for English-speaking learners placed in French-medium schools appeared to offer examples of second-language education which might work in African, Russian Federation and Southeast Asian countries. It needs to be remembered that the immersion programmes have never been mainstreamed, and they have always been well-resourced, and cater mainly for children whose parents have high levels of literacy and who do not lack resources at home. Later research, however, shows that these models are not replicable in mainstream school systems in African, Southeast Asian and Russian Federation countries. Even the middleclass first language speakers of English in the French immersion Canadian programmes prefer to take their school-leaving examinations in English, their first language, rather than in French, their second language. They have not, after all, achieved 'native-like' or 'near-native-like' proficiency in French by the end of school and do not feel sufficiently confident to risk getting poor grades in their second language, French. "There is not enough exposure to the target language in a classroom; the teacher is the only native language model (if he or she is), and the context is limited" (Helle, 1995: 118). Attempts to have French children, who tended to come from economically less advantaged homes, in English immersion programmes in Canada were seldom successful. The lesson we can draw from this in Africa is that if the *immersion* model has not met with the success it promised early on in the well-resourced Canadian conditions, there is no way that it could serve the majority of children in African countries well. No advisor, therefore, should recommend immersion models to governments on the continent.

A second possible exception appears in the linguistic development of Asian children from highly-literate Japanese, Korean, Mandarin and Cantonese home language backgrounds, and who are placed in second language medium school situations, for example in Singapore, or as newly-arrived communities in the USA, Australia and northern Europe. These students typically come from home backgrounds where parents are highly motivated and have the educational and/or economic power to ensure that their children succeed. These children do succeed even if their parents are not economically well-off at the time their children are in school. To date there is insufficient research to explain all the factors which lead to this success. What we do know is that students from other language backgrounds do not thrive in these programmes.

A note on the difference between immersion and submersion programmes:

The plunging of children into education programmes which are predominantly in their second language occurs in two contexts and has different outcomes. In the first context, children who come from middle-class, professional and socially-privileged homes are likely to have parents who have a high level of literacy and ample reading materials in the home. The parents will have positive and high expectations of their children succeeding in school and the home language is likely to be one of high status, like English in Canada; Russian in the Republics of the Russian Federation; or French in francophone Africa. Learners from such homes succeed in *immersion* programmes because of the range of other factors which keep them educationally afloat and support their success.

Learners from language communities which do not have such prestige, whose parents are from lower socio-economic backgrounds and who do not themselves have high levels of formal literacy, and who are plunged into second language-only programmes are said to be in *submersion programmes*. Typically most of these children do not have the support factors to keep them afloat and they sink to the bottom of the education system.

Placing most children from African, South American, South-East Asian and minority language speakers in the Russian Federation into second languageonly programmes results in *submersion* and it would not be responsible to attempt to replicate such models in Africa at this time. (What is *immersion* for middle-class children in well-resourced settings becomes *submersion* and a sink, for most, or swim, for very few children, in resource-poor conditions.)

What the international second-language experts know by 2010

There is, by 2010, no internationally-acknowledged second language acquisition expert who suggests that transition to the second language by the end of the third year of primary school will serve most children well. No acknowledged expert in psycholinguistics and second language acquisition will suggest that children in developing countries and minority or poor communities can switch from mother-tongue education by the end of the third year (or grade) to the second language and achieve well across the curriculum by the second half of primary school or in secondary school. There is no internationally-recognised or validated research that shows that this is possible. What the research does show, however, follows below.

What the models can offer students by the end of secondary school

The international literature includes longitudinal studies of different models of bilingual education, as well as the available literature on research conducted in African countries. A careful analysis of these resources will elicit sufficient data for predictions on the likely educational outcomes of students in the African settings considered in this publication.¹⁵

Studies which show positive linguistic and academic achievement in additive/strong bilingual programmes

The following is a selection of relevant African and international studies. Malherbe (1943), in an early study on bilingual education in South Africa, showed that students who had mother-tongue education to the end of primary school (seven years) followed by dual-medium Afrikaans-English education (years 8-12) performed better than students in monolingual Afrikaans and monolingual English schools:

- they performed better in the first language and second language;
- they outperformed their peers in other areas of the curriculum;
- they showed higher levels of social tolerance across linguistic groups than were evident in the monolingual secondary schools;
- even children with apparent learning difficulties performed better; and
- the dual-medium schools were mostly in rural and less well-resourced areas.

Bamgbose (1984a, 2000a, 2004a, b), Elugbe (1996); Fafunwa (1990) and others have shown through the well-resourced Six-Year Yoruba-medium project in

15 The studies include, for example: Malherbe, 1943; Bamgbose, 1984a, 2000a, 2004a, b; Fafunwa, 1990; Macdonald, 1990; Ramirez *et al.,* 1991; Thomas and Collier, 1997, 2002; Heugh, 2002, 2003. Ife, Nigeria, that compared to students who switched to English medium after three years of mother-tongue education:

- students who had six years of mother-tongue education performed better in English,
- they performed better in other content subjects, and
- therefore, year four was too early for the transition to occur, i.e.three years of mother-tongue education are not enough.

Macdonald (1990) has shown that students who were switched from first language medium (four years of Setswana medium) to English medium at the beginning of year five were not able to cope with the linguistic requirements of the system at that point.

- The study shows a dramatic rise in drop-outs from and repeaters in the system by the end of year five.
- Four years of mother-tongue education are therefore not enough.
- Four years of learning a second language for use as a medium are not enough (for example, by the end of year four, learners had exposure to 800 words in English, but they needed 7,000 to cope with the curriculum in year five).

Heugh (2002, 2003) has shown that:

- (1) Eight years of mother-tongue education in South African schools (1955-75) resulted in increasing pass rates for African language-speaking learners at the final exit point (year 12).
- (2) After a reduction to four years of mother-tongue education from 1976 onwards, the pass rate at year 12 fell from 83.7 per cent in 1976 to 44 per cent in 1992.
- (3) The education achievement of African pupils increased during the period of eight years of mother-tongue education despite the poor resourcing of schools and significantly unequal expenditure between white and black children.

Hartshorne (1992) revealed that English language achievement scores for year 12 students fell from a 78 per cent pass rate in 1978 to a 38.5 per cent pass rate in 1984, after mother-tongue education was reduced from eight to four years in South Africa. In recent research conducted in Ethiopia subsequent to that undertaken for the report on which this volume is based, Heugh, Benson, Gebre Yohannes and Bogale (2010) show that:

- Students with eight years of mother-tongue-medium education exhibit the highest levels of academic achievement across the curriculum.
- Students with a mix of eight years of mother-tongue medium for some subjects and six years for other subjects exhibit the next highest levels of achievement across the curriculum.
- Students with four years of mother-tongue medium, plus a continuation of mother tongue as a subject for at least another four years, achieve next highest level of achievement.
- Only those students with eight years of mother-tongue medium are likely to complete secondary school successfully.
- Only those students with eight years of mother-tongue medium are likely to achieve well in both mathematics and science subjects.
- Students who learn three languages at school (mother tongue, Amharic as the national language, and English as the foreign language) have a higher overall academic achievement than students with two languages (Amharic and English).
- Subsequent to large-scale investment in English language education and de-emphasis on the extended use of Ethiopian languages in education (from 2004 onwards), there has been a noticeable decline in student achievement in both English language and across the curriculum at year eight. The investment in English has not had the desired effect.

Ramirez *et al.* (1991), through a longitudinal study, show that under well-resourced conditions in the USA:

- Straight-for-English and early-exit models produce promising indications of educational achievement up to year three. Students appear to be catching up to the national norm for first language speakers.
- However, they reach a plateau of achievement, well below the norm in relation to first language learners in the system, about mid-way between years three and four.
- From year four onwards the achievement level of these learners falls in a downward curve in relation to the national norm.
- The longer the mother tongue is retained as a medium of learning, the better the prognosis for first language and second language achievement.
- The longer the mother tongue is retained as medium of learning, the better the achievement in mathematics.

Thomas and Collier (1997, 2002) and Collier and Thomas (2004) confirm the Ramirez *et al.* study and show the benefits of two-way immersion (dual-medium – additive) models in North America:

- Dual language programmes are the only ones in which the gap in performance between first language and second language learners of English closes.
- The separation of languages is a key feature of dual-language programmes (learners are taught through both languages in separate and structured ways; for example, with part of the lesson in one language and part in the other no unplanned code-mixing or code-switching).
- Remedial programmes which include straight-for-English and early-exit transition to English programmes may provide second language learners with support for one to four years, but four years of mother-tongue education are not enough to close the gap.
- Students from subtractive and early-exit models increasingly fall behind first language students in secondary school (i.e. the gap widens).

Summaries of other relevant studies can be found in ADEA (1996 and 1997); Küper (1998); and Baker (2002). The combined body of research referred to above confirms that for most school learners, across the world, the following apply:

- (a) The first language needs to be reinforced and developed for 12 years in order for successful second language learning and academic success to take place (see Dutcher and Tucker, 1995). This means birth to 12 years (i.e. first language medium for at least six years of formal schooling).
- (b) The international second language acquisition literature indicates that under optimal conditions (these do not apply in most education systems in Africa) it takes six to eight years to learn a second language sufficiently well enough to use it as a medium of instruction.
- (c) Language education models which remove the first language as a primary medium of instruction before year five will facilitate little success for the majority of learners. These students are most unlikely to do well in mathematics and or science.
- (d) Language education models which retain the first language as a primary medium of instruction for six years can succeed under very well-resourced conditions in African settings.
- (e) Eight years of mother-tongue education may be enough under less well-resourced conditions.

What the research has not yet pinned down exactly is the point between six and eight years of schooling which would be the break-even point. The Six Year Primary Project, with the benefit of significantly better resources (well-trained teachers plus adequate materials) than would apply under most conditions, showed that six years of mother-tongue education were enough. The South African example between 1955 and 1976 showed that under less-well-resourced conditions (well-trained teachers but insufficient materials) eight years of mother-tongue education were enough. The Ethiopian example provides the most recent evidence of what might be expected of students in eight years, six years and four years of mother-tongue-medium programmes. This example confirms that students do better and are more likely to be retained to the end of secondary school with eight years of mother tongue instruction. Since it is unlikely that well-resourced conditions could be generalised across the entire education system of any African country at this time, the minimum use of mother-tongue education is probably somewhere between six and eight years, or a combination of six and eight years. This confirms other analyses of applied linguists in Australia (Liddicoat, 1991) and in the North (e.g. Cummins, 1984, 2000; Skutnabb-Kangas, 1988, 2000; Krashen, 1996; Baker, 2002) who argue that six to eight years of mother-tongue education are necessary in those contexts. In other words, if children in better-resourced areas of the world require six to eight years of mother-tongue education to succeed, then so do children in Africa. There is no evidence that they can manage with less.

What educational planners can predict from the studies

A close analysis of data from the available African research and longitudinal and other studies from other parts of the world shows a consistent pattern of achievement emerging from students who have undergone a range of language education models.

The following is a tabular representation of what we may expect of the various language education models by the end of secondary school.

Table 2.4 Expected scores for L2 (subject) in well-resourced schools¹⁶ by years 10-12, depending on earlier language-medium choices

| | Expected average achievement scores for the second language as per different language models | | | |
|---------------------|--|--|---|---|
| 60% | | | | |
| 50% | | | | |
| 40% | | | | |
| 30% | | | | |
| 20% | | | | |
| 10% | | | | |
| 0 | | | | |
| Model | 1a Subtractive | 1b Subtractive | 2a Early-exit transitional | 2b Early-exit transitional |
| Use of L2 and L1 | L2 = MOI throughout plus L2 pull-out | L2 = MOI throughout plus L2 enrichment for content subjects | L1 = MOI for 2-3 years then switch to L2 as MOI | L1 = MOI for 2-3 years then switch to L2 as MOI & L2 enrichment for content subjects |
| Model used in: | Most countries in Africa: initially only Francophone and Lusophone countries, later adopted by Southern African Anglophone countries | | Southern Africa; USA | |

16 In other words: specialist teachers of English, small classes, adequate classroom resources (extrapolated from Ramirez 1991, Thomas and Collier 1997, 2002; correlated with Macdonald 1990 and Heugh 2002)

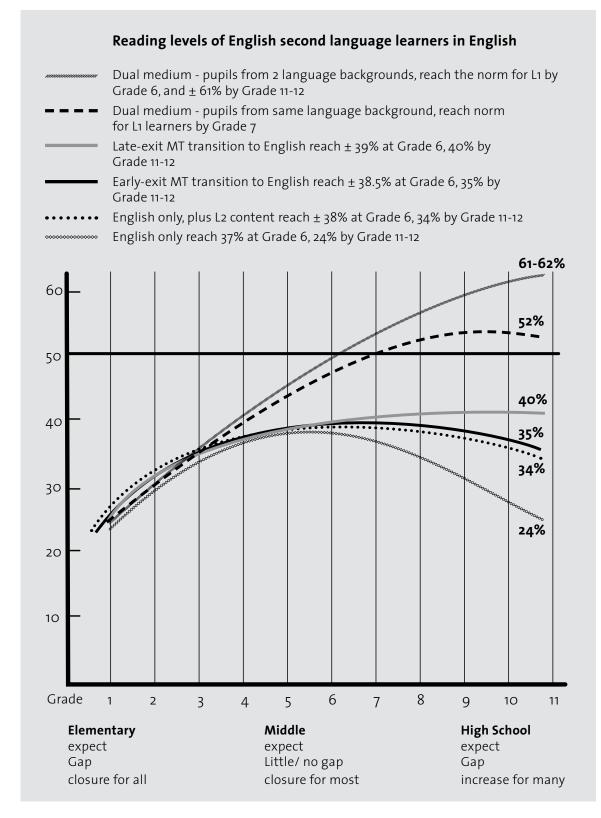
| 2c Medium-exit transitional | 3a Late-exit transitional | 3b Very late-exit transitional | 4a Additive | 4b Additive |
|--|--|--|--|--|
| L1 = MOI for 4 years then switch to L2 as MOI, L1 as a subject | L1 = MOI for 6/7 years then L2 as MOI | L1 = MOI for 8 years then L2 as MOI | Dual medium: L1 = MOI for 5-6 years, L1 + L2 as MOI from 7th year | L1 = MOI throughout plus good provision of L2 as subject |
| Burkina Faso; two regions of Ethiopia; Namibia (1976-1990); South Africa (1976-1995); until recently with one language (Chichewa) in Malawi | Six Year Primary Project, Nigeria; some regions in Ethiopia; Tanzania (Kiswahili) | Three regions of Ethiopia (Somali, Oromifa and Tigrinya); South Africa and Namibia (1955-1975); Guinea (Conakry) (1966-1984) | South Africa in early 20th century. Research from Africa, Europe and USA suggests this could work well in contemporary Africa | South Africa, with both English and Afrikaans speakers – with high levels of success in bilingualism |

L1 = First language/ mother tongue L2 = Second language MOI = Medium of instruction For the explanation of the terms "L2 pull-out" and "L2 enrichment" see the Glossary What this table does is to provide planners with a framework against which to measure and predict the likely outcomes for the education system, depending on the language education model in use. In African settings the majority of models are subtractive or early-exit (2a in the table). The best one could hope for would be scores of between 20-40 per cent in the second language by year 12 if these models continue.

If one examines early-exit models and the findings of large-scale studies conducted in the USA (Ramirez *et al.*, 1991; Thomas and Collier, 1997, 2002) as well as studies conducted in Africa – for example in Niger (Halaoui, 2003) and Zambia (Sampa, 2003) – one finds that for the first three to four years students in each of the programmes appear to be progressing well (i.e. they are learning to decode the written text of simple sentences, usually in a narrative genre). However, by mid-way through year four (sometimes sooner), these students in the straight-for-second language (submersion) or early-exit to second language programmes start to fall behind those who are, in other contexts, being taught in the mother tongue. They cannot keep up with the national norms for students who have first language education throughout. Furthermore, at each grade level they fall further behind.

Thomas and Collier (1997, 2002), whose research has tracked secondlanguage learners of English in the USA across various programmes, show how achievement progresses over years one to three, starts to slow down in year four, flattens out in year five, and then begins to lose ground against first language learners after that point (see Figure 2.1).

Figure 2.1 Expected academic achievement in English of students in different language medium/ESL models



(Graphs adapted from: Thomas & Collier, 1997:53; and used with permission; consistent with findings in SADC and South African studies, 2002-2005)

Although Figure 2.1 arises out of research conducted in the USA, there is evidence which shows that these findings illustrate the performance of students in African countries. Recent studies of student performance in language and mathematics in South Africa show that students' language/ literacy achievement in the predominantly early-exit from mother-tongue education by the end of year/grade three and year/grade six fall almost exactly on the curved lines for students in the North America who receive English only with some second language (L2) support (and who achieve an average of 34 per cent by year 11) and the early-exit mother tongue transition to English (with average achievement of 35 per cent by year 11) (Thomas and Collier, 1997).

The national average achievement in the language of learning and teaching, English for the majority of students in year/grade six in South Africa is 38 per cent (DoE, 2005). The average achievement in mathematics is 11 percentage points below that for language (i.e. 27 per cent), which is not surprising. Recent analysis of the Southern Africa Consortium for Monitoring Educational Quality II (SACMEQ II) study of reading and numeracy at year/grade six in 14 Southern and East African countries shows that 44 per cent of learners achieved a minimum level of reading and only 14.6 per cent of learners achieved the desirable level of reading by year six (Mothibele, 2005: Table 2). Poor proficiency in the language of learning will result in poor achievement in other subjects, most particularly in mathematics where language use is significantly decontextualised. Preliminary information from more recent longitudinal studies of the Zambian early literacy and exit to English programme, which earlier showed signs of success (see Sampa, 2003), indicate that by the fourth and fifth year, this starts to decline and lose momentum. Similarly, the early analysis of success of bilingual programmes in Niger, show that the rate of success starts to dissipate by years four and five. "(T)he positive effect of the experimental school is more pronounced in grade 3 than in grade 6" (ADEA, 2001: 55). These findings all point to the need for learners to have extended mother-tongue programmes. We can now predict with some accuracy that learners in early-exit programmes and who remain in the system beyond years four to five are likely to have to repeat or drop out of the system.

Across the continent, fewer than 50 per cent of pupils remain in school to the end of primary school. Repetition and attrition (drop-out) rates are very high, thus it is not immediately apparent to education planners that if they choose early-exit models, they are effectively selecting an outcome in which students can only score 20-40 per cent in the language which is used as the medium of instruction by years/grades 10-12. Without realising the consequences, the education officials of most countries select a model which can only offer limited success, and limited access to secondary school and beyond. Students will not be able to understand or succeed in areas of the curriculum such as science and mathematics if they do not have a sufficient proficiency in the medium of instruction. This is painfully obvious in South Africa where less than one per cent of students who are first language speakers of African languages are able to gain a university entrance pass in mathematics and science at the end of secondary school.

So, why do the decision-makers invest in models which cannot work?

Why is there a convergence towards early-exit models in many African countries?

Policy decisions are explained in this volume by Wolff (Chapter 1). In addition to the discussion in that chapter, there are several other reasons why the wrong education decisions are taken in one country after the next. These include:

- The cycle of influence, where one country's policy decision has been mirrored by the next after independence. One by one, education authorities have decided to favour either straight-for-ILWC models (subtractive) or earlyexit transitional models. If one country chooses early-exit, it seems safe for a neighbouring country to do the same. Zambia's straight-for-English approach in 1966 had significant influence on later Namibian (early SWAPO debates, see UNIN, 1981) and South African debates or decisions on policy and implementation (through influences on the ANC education policy debates in the 1990s). There are also significant similarities in the decisions of francophone countries.
- Key (well-meaning) individuals and agencies in each context take implementation decisions which conflict with the actual policy, as exemplified by Akinnaso (1991) and between 1997-2005 in South Africa (Heugh, 2002, 2003).
- Key advisors to government ministries and departments of education do not have the requisite expertise in the cognitive aspects of language education and may even be foreign to the multilingual context. (Choosing the wrong advisors, such as in Zambia, Namibia and South Africa, has also had a negative influence.)

- Key NGO providers, however well-meaning, conflate different language acquisition concepts and language education models and present transitional models as if they are additive (see below).
- Donor agencies employ the services of evaluators who, for various reasons, offer compromised, flawed or overly optimistic evaluations of subtractive/ submersion or early-exit transitional models.

Confusion and conflation of key language acquisition concepts and language education models

The difference between transfer and transition

The terms **transfer** and **transition** sound similar and are often confused or used interchangeably. In fact they come from different fields of study and have significantly different meanings.

Transfer is a term which comes from the literature on psycholinguistics and second language acquisition (SLA) theory. It is most often associated with the work of Jim Cummins (e.g. 1984, and see Baker, 2002). It involves a hypothesis that there is a cognitive process where what is known in the first language (knowledge of language and academic concepts) can be transferred to the second language. This knowledge includes how to read, how to write and how to write for different purposes (genres e.g. a story, letter, science experiment, history essay). It includes the understanding of concepts, an understanding of how the first language works and making inferences or interpreting text. An adequate degree of transfer from the first language to the second language is not possible until the first language is sufficiently well established and the second language is sufficiently well known. Jim Cummins and other psycholinguists believe that an adequate transfer of knowledge for formal education is only possible once there is a firm foundation of academic and cognitive development in the first language. Transfer is possible in additive bilingual programmes because the first language is retained as the primary medium of learning and language from which the knowledge and skills can be transferred.¹⁷

¹⁷ It is also important to note that the danger of discussing transfer in SLA in a document like this is that it can be misunderstood because of the need to summarise key aspects of the discussion. Obviously all language users begin to transfer some of what they know from one language to another as they acquire the linguistic tools in the second language (L2). So there is some transfer early on in SLA and this increases the more L2 is learned. However, there has to be sufficient knowledge of and in the L2 before it is possible to transfer enough of what one knows in one language to the other language, and also continue to keep up with the rest of the school requirements for learning across the curriculum.

It has become clear, however, that some agencies are not clear about the difference between learning to use early literacy decoding skills, and the cognitively more challenging requirements of comprehending or making meaning of extended written text.¹⁸ Therefore, some programmes are designed on inadequate assumptions that early literacy decoding skills in the first language facilitates a transfer of literacy skills to the second language within a short period.¹⁹ Many early mother-tongue and literacy programmes in and of themselves make an enormous contribution to the development and use of African languages. However, we now know from incontrovertible evidence that where they offer transition to the second language, especially when this is the use of the second language as medium by year four, they are not effecting adequate transfer of knowledge.

In such instances the programme designers have misunderstood the difference between *transition* to English (before learners could possibly have learned enough of the second language to function adequately in educational contexts across the curriculum) and *transfer* to the second language when the learners have developed cognitive academic literacy and language proficiency (i.e. to a level where they can understand decontextualised text, and their second language is sufficiently advanced to make transfer possible).

> Additive models facilitate transfer and Transfer is possible within additive models

Transition is not a cognitive process. It involves a model of language education (i.e. programme design) where teaching shifts or switches from using the first language to the second language as a medium of instruction. Learners may be

18 For example: if an English speaker sees text in Spanish for the first time, the English speaker will recognise sentences and individual words and even be able to 'read' the words aloud – but this does not mean that the English speaker has any idea of what the words mean.
19 For example: in the Zambian reading programmes of 2004 (mother tongue literacy in year one, oral introduction of English in year one; introduction to L2 literacy in year two). The programme agents assert, in a video clip, "A Quiet Revolution" (Ministry of Education, Zambia, 2004), that mother tongue literacy facilitates a "transfer of skills" and a "transfer to English" in year two. The slippage of terminology creates the wrong impression that learners would thus be able to learn through the medium of English, because they have managed to transfer what they know in mother tongue across to English. All that learners can do at this stage is to apply decoding skills of the Roman alphabet across to English, and apply this to a very small lexicon and beginner grasp of the syntax. The required level of semantic meaning, which would be present in the first language, for negotiating the rest of the curriculum, is not yet nearly developed in English at this point. Similar or duplicate programmes in several 'anglophone' countries are based on the same misunderstanding.

able to apply surface-level decoding skills of early literacy to the beginning of decoding the second language early on. However, the transition to the second language usually happens before the learner has sufficient knowledge in the second language (i.e. it happens before the learner can transfer knowledge that requires interpretative skills and academic competence to the second language). If the first language is removed as a medium of instruction too early, there is no (or insufficient) transfer. One cannot transfer (move) knowledge from one language to another if the scaffolding in the former has been removed from the education process.

Early-exit transition models do not facilitate transfer and Transfer is highly unlikely in early-exit transitional models

Successful transfer of cognitively decontextualised or challenging academic and language knowledge may be possible in the late-exit (after six years of mother-tongue education) and very late-exit (after eight years of mothertongue education) transition programmes. Transfer may be possible in very well-resourced circumstances after six years of mother-tongue education when accompanied with exceptional teaching of the second language as a subject by second language specialists. It is more likely to be possible after eight years of mother-tongue education in less well-resourced circumstances.

What happens with the confusion?

Frequently, language education providers, NGOs, development agencies and education advisors mistake these concepts. If the agents think that transfer is the same as transition, then they think that transitional models are the same as additive models. Because they confuse the terms, such advisors are not clear about the different outcomes which will be achieved through the different models. Therefore, although these agencies do not actively support straight-for English-, French- or Portuguese-only models, they nevertheless, by default, contribute towards the same educational outcome. When they write documents about the models they recommend for implementation and they use the terminology incorrectly, they inadvertently contribute to the cycle of confusion about which models may in fact work and which cannot work.

Examples of the transposition of terms

There are several examples of confusion or transposition of terms and some of these from different contexts are illustrated below. There have been frequent

confusions in the South African literature between the transfer hypothesis and the transition model since the early 1990s. It occurred in the debates of the Department of Education and Training (DET) (responsible for education of African language students prior to 1994) and even in the work of a highlyrespected and influential educator, Ken Hartshorne (1992). More importantly, it continued via last-minute editing changes in the final Report on Language of the National Education Policy Investigation (NEPI, 1992) and then into later, strategically important documentation (e.g. ANC, 1994; Taylor and Vinjevold, 1999). In each case, there is a transposition and confusion of terms and the research via well-meaning and highly-influential educators who were unfamiliar with psycholinguistics and second language acquisition theory.

Language education specialists with experience of applied, socio- and psycholinguistics, nevertheless, influenced the explicit formulation and adoption of language education policy supportive of additive bilingual education for the country (DoE, 1997). Despite this, the influence of advisors in the earlier documentation have carried the day and their preference for early-exit transition-to-English models have filtered into the new revised National Curriculum Statements of the national department of education (DoE, 2002). The curriculum documents accommodate the language policy by stating that the approach is consistent with additive bilingual education, but the implementation of the curriculum is steered towards early-exit to English for speakers of African languages after year three.

From 2002 to 2009, the revised curriculum was based on the completely incorrect assumption that additive bilingual education can be provided with three years of mother-tongue education followed by a switch to English medium from year four onwards. The training programmes for teachers of year four and upwards facilitated by the department were not geared towards mother-tongue medium beyond year three.

The confusion appears also in the literature of some of those who offer language education programmes even though they have participated in the applied linguistics' and sociolinguistic debates about these issues since the early 1990s. With much sadness and several misgivings, this author believes that it is necessary to mention that even well-meaning and well-intentioned initiatives on the continent have often misunderstood, misconstrued or misapplied the theory of additive bilingual education and mis-identified early-exit models for either late-exit or additive bilingual models of education. This confusion characterised much of the work of the Molteno Project from the 1990s to 2005 when project staff became aware of the critique of their work in an early draft of the Report upon which this volume is based (see also Heugh in Alidou *et al.*, 2006). Unfortunately, the conflation of the terms transition and transfer was carried through to the Zambian Reading project. In the Zambian context, initial literacy in year one, with the rest of the curriculum taught through English, was understood as facilitating transfer – when in fact it facilitated a very early-exit-to-English model.

Molteno was not the only influential project whose work and programmes found their way into several 'anglophone' countries of Africa; so too has been some of the work of the advisors and consultants for the Summer Institute of Linguistics (SIL). In the workshop on "Developing a language and education" policy and implementing multilingual education in Liberia", a proposal for a gradual transition from mother-tongue education to English over an eightyear period was identified as "a 'late exit' or 'additive' bilingual model" (Malone and Malone, 2004: 10). While this model certainly made a stronger case for extended use of African languages than most transitional models in use on the continent the rate and extent to which the mother tongue was to be replaced in fact located this model within an early-exit model. The mother tongue was to be replaced by English for 50 per cent of the time by year/grade 3,75 per cent in year/ grade four; 90 per cent in year/grade five. For a programme to qualify as additive, the second language cannot replace the first language for more than 50 per cent of the teaching day. In late-exit transitional models, the first language needs to be retained as the primary/main medium of instruction for at least 40-45 per cent of the time to the end of year six (Ramirez et al., 1991). However, in this proposal, the model reduces the first language to 25 per cent of the time in year/grade four (sixth year, if the two preschool years are counted). Therefore, it does not meet the Ramirez et al. definition of late-exit transition models. This proposal shifts the early-exit transition boundaries, but not quite far enough and it could be strengthened by slowing down the rate at which transition is proposed. Subsequent to the early draft of the Report, the authors of the proposal are understood to have revisited their recommendations.

In a third example, the Project for the Study of Alternative Education in South Africa (PRAESA), a highly influential project in South Africa which has advanced multilingualism, multilingual teacher education and teacher training in Southern African countries, mis-identified an experimental early-exit biliteracy project as an additive programme. While the experiment was intended, incrementally, to implement an additive model, systemic conditions prevented

this from happening. Instead, a limited biliteracy intervention in the school, amounting to a few hours a week, for a period of five years, effected only very limited exposure to the mother tongue whilst the mainstream curriculum continued through English (see also Heugh 2009).

The fundamental flaw or source of the confusion: the over-emphasis of second-language methodology in applied linguistics

Part of the colonial legacy which affects much of the continent is that the knowledge borrowed from the former colonial power is given privileged status, and knowledge derived from local settings is seen as less significant. For historical reasons, language education in South Africa, and in other parts of the former anglophone countries of Africa, has relied heavily on studies in applied linguistics and the English as a Second Language (ESL) industry in Britain, the USA and Australia. South African universities and teacher-training institutions have drawn mainly from these studies in applied linguistics and, to a lesser extent, from North American studies. In particular, teacher education programmes and postgraduate studies of applied linguistics in South Africa have focused on the methodologies that underpin the Teaching English as a Second Language (TESL), designed in Britain. In Britain, a large industry has developed around ESL courses, programmes and textbooks designed to assist newly-arrived minority communities in assimilating into British society and equipping them with the necessary language (survival) skills for this process (see also a similar discussion in the USA by Tollefson, 1991). They were also designed for use in second and foreign language programmes used in European schools where English is taught as a subject, but not used as a medium of instruction. An extension of the ESL industry has been to disseminate English as a Second Language (ESL) and English as a Foreign Language (EFL) programmes to other parts of the world.²⁰

Similar scenarios apply to the use of French and Portuguese second language programmes (FSL, PSL) in use in former francophone or lusophone countries in Africa. These programmes have, in general, been designed from within the field of applied linguistics with adaptations which focus on new classroom strategies and practices. The programme design, however, has not kept up to

²⁰ This has been so successful that there is now a thriving Australian English as a second language (ESL) industry which targets the Pacific Rim countries.

²¹ Many people assume that second language acquisition (SLA) and (English/French/Portuguese/ Spanish) second language teaching is the same discipline. Although they are related, they come from different academic disciplines. In the first, the emphasis is on acquisition and cognition, i.e. it arises out of psycholinguistics and often in relation to sociolinguistics. ESL/FSL, etc, is focused on the application of what is known in linguistics (e.g. the structure of language) and how to teach this in a classroom through various methodologies (tricks of the profession).

date with current and new research in the related field of psycholinguistics and second language acquisition²¹ in particular. So while those who work in second language acquisition have become increasingly aware, over the last 15 years, that it takes at least six to eight years to learn enough of the second language in order to learn through the second language, ESL/FSL/PSL specialists have focused more on new second language methodologies and materials. The idea behind this is that if one can improve the technology of language teaching, students' learning will improve. The new materials and methodologies tend to be tested through trials in the North and in settings with adequate classroom resources and well-trained teachers, who are good models of the language they teach. They are then brought to African classrooms. Sometimes adaptations are made to the materials, involving the exchange of Eurocentric names and pictures for African ones. However, the more significant differences in context - especially the multilingual nature of the continent, the reality that English, French, Portuguese and Spanish remain foreign languages for the majority, and that their use is limited mainly to metropolitan areas – have escaped attention.

The design flaw is that insufficient attention is paid to the cognitive development and needs of the African language-speaking child/learner by the second-language industry. This results in an extremely serious error: the use of English/French/Portuguese second language programmes for a purpose for which they were not intended. The objective is to teach the second language (as a subject), but they are not meant to prepare students to learn through the medium of the second language. They are designed to teach one subject from the whole curriculum. They are kept up–to-date with the latest subject language teaching technologies, ranging from being mediocre to state-of-theart in quality. The purpose of this study, however, is not to evaluate the second language programmes designed to teach the language as a subject only. It is to focus on the medium of instruction, in other words, use of mother-tongue and second language programmes as these are used for learning across the curriculum.

A programme designed to teach a second language as a subject should not be used to prepare students to learn through this language prematurely. Programmes which are designed to prepare students to learn through a second language, especially in African settings where for most students the educational second language is really a foreign language, will take into account what is known from the study of language and cognition in second language acquisition and psycholinguistics. Therefore, programme agents who suggest that the ESL/FSL/PSL programmes can achieve this in fewer than six years are incorrect and make claims which are not substantiated through valid evaluation or research; and / or have insufficient knowledge of language and cognition.

Evaluation of literacy and language education programmes

Owing to a historical preference for studies in applied linguistics and especially English as a Second Language in South African institutions there are not, currently, enough language education specialists who have a thorough grounding in psycholinguistics, the sociolinguistics of multilingual communities in Africa, and who also work in language programme design (applied linguistics). It would appear that the first two areas require more emphasis in other African countries as well. A consequence of this is that there are few South African specialists who are sufficiently informed to perform evaluations of literacy and language programmes in South Africa. Again, this is not necessarily a phenomenon peculiar to South Africa. A sample study of several evaluations of literacy and language programmes conducted in Zambia, Ghana, Niger, Cameroon, Namibia and Mozambique show that evaluators from a cross-section of countries, within and without Africa, often do not pay sufficient attention to cognition, second language acquisition and psycholinguistics and sociolinguistic issues when they evaluate second language programmes.

Just as examinations, tests or assessments require 'construct validity'²² as well as 'rater reliability',²³ so too do the evaluations of education programmes. Language education evaluation should not omit psycholinguistic analysis, clear identification of the type of language programme, the sociolinguistic environment in which the intervention occurs and a clear methodology that illustrates which and how each indicator is arrived at through careful construct validity checks and balances.

Evaluators need to be certain that their reports unequivocally, accurately and clearly identify the programme design as including one or more of the following:

- a. mother-tongue literacy;
- b. second language literacy/language (as a subject);

22 Bachman and Palmer (1996: 21) explain this term as follows: "Construct validity pertains to the meaningfulness and appropriateness of the interpretations that we make on the basis of test scores".

23 This term refers to the requisite training and expertise of the 'rater' or in this case, the evaluator. Does the evaluator have the requisite expertise to perform an adequate evaluation and is this reliable?

- c. mother-tongue medium;
- d. second language as medium of instruction (subtractive/submersion/earlyexit/late-exit transition to L2 medium); and
- e. additive bilingual (mother-tongue education kept as medium for 80-90 per cent of the time for three to five years; 50 per cent of time across the curriculum from the sixth year to the end of school).

In addition, the period over which the programme is evaluated needs to be made explicit together with an assessment of its medium- to long-term effect on the educational achievement of learners. It is generally accepted in education debates that any well-resourced intervention will show improved results when compared with any dysfunctional system. The improvements occur as a result of better teacher training, better or more materials and attention focused on the site (school) in which the intervention occurs. This does not necessarily have anything to do with the programme itself. Therefore it is not valid to ascribe improvement to the programme unless the effect of the actual programme can be isolated from other associated factors. The value of the Ramirez et al. (1991) and Thomas and Collier (1997 and 2002) longitudinal studies on language education programmes is that they demonstrate that there is little point in evaluating any language programme during years/grades one to three (or four). All well-resourced programme designs (whether straight for the second language or initial mother tongue followed by early-exit to the second language) show that students improve at similar rates over year/grade one to three or four. The differences start to become evident only from year/ grade four onwards (see above).

At the same time, any evaluation of a mother-tongue or second-language education programme, provided by well-trained teachers and with adequate materials, will show significant improvement compared with programmes provided in schools which have poorly-trained teachers, few learning materials and no specific intervention. Dysfunctional school systems happen to be the norm in most countries at present. It is consequently obvious that any newly-introduced literacy or second-language programme will show improvement over the achievements found in control schools selected from a mainly dysfunctional school system. Therefore, this needs to be taken into consideration by the evaluator/s and the stakeholders who commission such evaluations.

Unfortunately, although there are clearly many evaluations which do comply with criteria for construct validity and issues of reliability, there are many other

examples of evaluations which for one reason or another 'fudge' (i) the divide between transitional and additive programmes, (ii) the use of control groups from dysfunctional contexts and (iii) the time-frame over which the evaluation is conducted.

Donor organisations or governments may request a programme evaluation for the period during which the intervention is conducted. Such evaluations can only reflect upon the evidence immediately before them and this is inevitably a well-resourced literacy/language programme in grades one to three, but located in an early-exit model. The crucial feature of the international research – specifically that well-resourced teaching of either mother-tongue literacy or second language programmes in grades one to three shows positive results than poorly-resourced teaching, whether in the first language or second language – is not made sufficiently apparent in most evaluations in Africa.²⁴ What is also not acknowledged is that in all subtractive and early-exit models, there is an expected initial improvement, then a leveling-out of performance, which is then followed by a steady decline in performance from about mid-way through year four (see Ramirez *et al.*, 1991; Thomas and Collier 1997, 2002).

Currently, there is only one system-wide example of fully functioning lateexit or additive programmes to evaluate in sub-Saharan Africa, in Ethiopia (see Heugh et al. 2007; Benson et al, 2010; Heugh et al., 2010). Most were and continue to be early-exit programmes.²⁵ The efficacy of these programmes can only be measured if the assessment of participants monitors their achievement to at least grade six. To date, the early-exit programmes in Africa show that early achievement starts to disappear by grades four to five. The gap between mother-tongue education learners and early-exit-to-second language learners starts to widen from this point, as evident in the discussions of the transitional models in Niger by Halaoui (2003), recent findings of a system-wide study of year/grade six students in South Africa (DoE 2005), and Alidou and Brock-Utne (in this volume). This parallels the Thomas and Collier (1997, 2002) research (see Figure 2.1) conducted in the USA. System-wide assessment of students at grade/ year eight in Ethiopia in 2000, 2004 and 2008, however, offer internationally compelling evidence of what one might expect of students who have zero, four years, six years and eight years of mother-tongue medium education. As

²⁵ With the exception of the LOITASA project, discussed by Brock-Utne and Alidou elsewhere in this report.

discussed earlier in this chapter, students with eight years of mother-tongue medium education outperform all other students in the system and are most likely to enter secondary school and be retained to the end of secondary. This is in a country where English is not a second language, but very defininitely a foreign language spoken only by 0.3% of the population. Students with six years of mother-tongue medium education do less well and students who have some subjects in the mother tongue for six years and other subjects in the mother tongue for six years and other subjects in the with mathematics and science (Heugh *et al.*, 2010).

The current understanding of the relationship between language development and cognition discussed earlier is supported through this evidence. Thus, shortterm studies of subtractive/transitional programmes are not valid unless there is a longitudinal design of five to six years during which the performance of students is tracked as they progress through, repeat or drop out of primary school. If it can be shown that students continue to demonstrate linguistic and academic achievement through the first six years of school, then the prognosis for further success is good. If students' achievement levels start to decline by four to five years of schooling, then it is unlikely that this trend can be reversed without a change of programme design.

Learners who have exited from the early mother-tongue programmes; those who are in the second language medium programmes from the end of year three

"...may not necessarily catch up. This is particularly true for the secondary level, but may remain hidden at the elementary level as students "pass" the test at the lowest level, but are not quite proficient yet. These findings... underscore that the schooling of minority language students is not only the responsibility of bilingual or ESL teachers but continues after students have been exited from such programmes. Statements about achievement patterns... or claims that linguistic barriers for [ESL learners] have been overcome can only be examined when exited [ESL learners] are included in the analysis... It is therefore important to disaggregate data for ... [ESL learners] and follow their achievement over time" (De Jong, 2004: 13).

The Ethiopian research which tracks students for at least eight years shows very clearly that students who are obliged to study through a foreign language (English) after four years of mother-tongue education are most unlikely to

complete primary school successfully and there will be a very low throughput rate to secondary. Any evaluation of an early-exit transitional programme which does not show students' performance to at least year/grade six (i.e. the medium-term resilience of the intervention) is fundamentally flawed or lacking in construct validity.

While evaluators wish to acknowledge progress in moving from subtractive (zero mother-tongue education) programmes to early-exit, they ought not to obscure the central problem. It is to the medium- to long-term disservice of the programme provider, the community in which the programme is conducted, and the national education system where relevant, if the evaluator does not point out the fundamental design flaw(s). The design flaw of the early-exit models offer a lose-lose scenario for all stakeholders over the medium- to long-term.

Other aspects that require sensitive attention are the ambiguous positions of evaluators and the rigour of evaluations. If an evaluator is an internal agent of the agency responsible for the programme, then it could compromise the independence of the evaluation. While this is less likely with external evaluators, it remains a serious challenge to ensure evaluations are objective, unbiased and carried out by the appropriate expert with suitable experience, knowledge and objectivity. It is thus important to remain aware of possibilities of subjective interference and bias within evaluations and adjust recommendations and changes accordingly.

Influential advisors and transitional models

Sometimes, even when the external advisors/agencies understand the need for substantial mother-tongue education, they feel constrained to offer ministries/departments of education encouragement when there is a shift from subtractive to early-exit models. Although they understand that this is insufficient, they believe that the use of some mother-tongue education is better than none at all.²⁶ Kamanda (2002) argues that UNESCO has consistently advocated transitional programmes:

26 Carol Benson, in discussion with participants in a Training of Trainers for Multilingual Education programme run by the Project for the Study of Alternative Education in South Africa (PRAESA) at the University of Cape Town (August 2004).

"Transitional mother-tongue literacy, the model commonly associated with Unesco [UNESCO], results from the use of [the mother tongue] as a bridge to the introduction of a more permanent medium for literacy instruction" (Kamanda, 2002: 195).

If this is indeed the case, then powerful bodies such as UNESCO need to rethink their positions. The argument here is that there has been a history of blurring the edges between different models and use of language as a medium in the debates and policies of influential stakeholders and that this contributes towards perpetuating a confusion and partial understanding of issues within the government departments responsible for education in the region. Education providers need much sharper definitions, clarity about outcomes and principled positions.

Concluding remarks on early-exit transition models

At both meso- and micro-levels, a combination of factors has combined to influence a convergence towards early-exit transitional models. Some of these have to do with terminological and conceptual difficulties, which have muddled the debates. Some of these have to do with the participation of powerful individuals and organisations that have misunderstood, conflated or underestimated the literature in psycho- and applied linguistics.

Alidou (2004) notes that since the 1990 World Conference on "Education for All" (EFA), there has been increased interest in experimental programmes that begin with African languages in education. Alidou and Maman (2003) argue that since the EFA conference most countries talk about additive bilingual models but have transitional ones in place. Experimental bilingual or trilingual programmes have undergone trials in several African countries and usually funded by aid agencies from Germany, the Netherlands and the Nordic countries. Well-meaning as they may be, they are, nevertheless, usually framed as transitional models, with the ultimate target being an exogenous language. The difficulty with this is that while they attempt to revalue African languages, the process is fundamentally flawed. Models based on transition from the local language to one of higher status, in which most teachers are not proficient, and which the communities seldom hear or use in everyday activities, have already failed across the continent for 120 years (Wolff, 2000a; Stroud, 2002; Ouane, 2003). The solution lies elsewhere.

Successful prolonged use of African languages in education

An African language as medium of instruction throughout the school system

There have been examples of strong/additive and late-exit transitional language models in Africa which have successful academic outcomes and these offer useful insights. Somalia is the only country to have achieved, since independence, the use of an African language throughout school education. Government commitment towards rapid implementation effected the development of the Somali orthography, the use and resourcing of Somali-medium education between 1973 and 1986. What was required was a government-driven process. The outbreak of civil war, however, has brought about a collapse in the education system (Griefenow-Mewis, 2004). Recent developments in Ethiopia, however, hold the most promise for the continent.

The use of a national language of wider communication as medium of instruction

Ethiopia and Tanzania – one national language of wider communication across the system

Ethiopia and Tanzania have used dominant African languages, Amharic and Kiswahili, respectively, as media of instruction throughout primary school, followed by transition to English in secondary school. On the one hand, these examples offer a great deal of encouragement in terms of the development and use of African languages for the duration of primary school education. On the other hand, the danger of concentrating on only one language is that insufficient attention is given the other languages and there are educational difficulties for the first language speakers of those languages which have not been developed for use in school. In both Ethiopia and Tanzania few students have proceeded into secondary school education and beyond within this system. The response to declining entries to secondary school in Tanzania has been pressure to introduce English medium earlier than before (Roy-Campbell and Qorro, 1997; Brock-Utne, 2005b). Ethiopia has, however, opted to introduce other significant regional languages for mother-tongue education in primary school since 1994 (see below).

The Six Year Primary Project in Ife, Nigeria

The Six Year Primary Project in Ife, Nigeria, in which Yoruba was used as the medium of instruction for the six years of primary education, has been well-documented (see for example, Afolayan, 1984; Elugbe, 1996; Bamgbose, 2000a and Adegbija, 2003). Key research findings from this experiment are discussed earlier in this chapter. The significant lesson from this longitudinal study and programme is that mother-tongue medium does not prevent proficiency in the language of wider communication. Rather, the extended use of the mother tongue is better able to facilitate high levels of proficiency in the other target language. This project confirms, in an African setting, the current second language acquisition theories, which show that in well-resourced conditions (well-prepared teachers and good materials) six years of second language teaching can facilitate successful transition to using the second language as medium of instruction in year/grade seven. This is an example of a late-exit transition to English model.

The use of multiple African languages as medium of instruction

There are three examples of multiple local language development and use throughout primary education: in Ethiopia (since 1994), Guinea (Conakry) and South Africa (and Namibia when under the administration of South Africa to 1990).

Ethiopia

A new government introduced mother-tongue education for the eight years of primary school in Ethiopia in 1994, along with compulsory learning of Amharic as a second language for those students who have home languages other than Amharic (about two-thirds of the population), and a transition to English medium in secondary school (grade/year nine). It needs to be noted that Ethiopia is one of the poorest countries of the continent and the world, yet within six years, 22 Ethiopian languages in addition to Amharic had been developed for use as languages of learning (media of instruction) for at least six years, and that five had been developed for use for eight years as media of instruction. This was accomplished through a system of decentralising educational administration to the regions and the emergence of enthusiastic and skilled language development teams and local publishers. However, because conditions across the country are complicated (civil conflict, military conflict along three national borders, the impact of climate change, and so on) implementation has differed from one region to the next. The result is that it is possible in Ethiopia to see the effect of most of the language education models

currently implemented in Africa, and across the entire system, on a region-byregion basis. This is facilitated also because of systemic assessment of grade four and grade eight students in 2000, 2004 and 2008. Ethiopia, therefore, offers the continent – and indeed the world – a contemporary laboratory for examining the relationship between mother tongue, a national/regional language of significance and a 'foreign' or international language of wider communication, in the school system.

The systemic assessments in 2000, 2004 and 2008 show that students with eight years of mother-tongue medium education achieve better than students with six or four years of mother-tongue education (cf. Mekonnen, 2005; Heugh *et al.*, 2007, Benson *et al.*, 2010, Heugh *et al.*, 2010). The Ethiopian research also contributes new data to the international theory on bilingual and multilingual education. It shows that, in a country where the target language is a foreign language, rather than a widely-used second language, students need eight years of mother-tongue education in order to have a fair chance of reaching the end of primary school successfully and therefore to have a fair chance of enrolling in secondary school. In the Ethiopian case, of those students who reach the end of primary school, only seven per cent will reach the end of secondary and most of these are students who had eight years of mother-tongue medium education.

The Ethiopian example shows that it is possible for a very poor country to implement multilingual education across the country within a few years, with few resources. This correlates with the South African example under apartheid. The two examples show that over the last 50 years it is entirely possible to implement multilingual education with minimal resources despite the protestations to the contrary (cf. also Chapter 6 in this volume).

Guinea-Conakry

The first independent government of Guinea Conakry, formerly a French colony, also established mother-tongue education in eight (later reduced to six) local languages for eight years of schooling from 1966 to 1984. The mother-tongue education policy appears to have failed because parents and communities were not sufficiently consulted and the process was entirely top-down and linked specifically to the autocratic leadership of Sékou Touré (Sylla, 1997; Yerende, 2005). Political changes since 1984 resulted in a reversal of the policy to French medium. Most recently there has been discussion of adapting a model from Mali in which three years of mother tongue is followed by transition to French (Yerende, 2005).

South Africa

Government, during the first phase of apartheid (1955-1976), succeeded in training teachers, developing terminology, translating school textbooks and establishing mother-tongue medium education for eight years of primary education for African pupils in South Africa and Namibia (formerly South-West Africa). This *very late-exit model* was achieved with minimal expenditure: far less was spent on the education of African children than was spent on Englishand Afrikaans-speaking learners (see chapter 6). Even with meager resources devoted to African education, the apartheid system developed the linguistic terminology, textbooks and teacher education programmes to establish the system in seven South African languages and several Namibian languages.

In addition to the extended use of these languages, Afrikaans, an informal patois at the turn of the 20th century was developed during apartheid into a language of use throughout the entire education system and was used at highly-sophisticated academic levels at tertiary institutions. This example exceeds even that of Somali, referred to above. Political resistance to apartheid and the compulsory use of Afrikaans alongside English in secondary school for African children, however, resulted in a student uprising in Soweto in June 1976. Thereafter mother-tongue education for African children was reduced to four years in South Africa, followed by a switch to English for most students.

The example of Afrikaans is instructive on another level. Afrikaans-speaking students who have benefitted from mother-tongue education to the end of schooling and even through university education, have consistently scored higher academic results than any other students did in the country. During the first half of the twentieth century, the use of mother-tongue education in primary schools for speakers of Afrikaans and English and the widespread occurrence, especially in rural areas, of dual medium (simultaneous use of Afrikaans and English as media of instruction across the curriculum) for secondary schools achieved the highest levels of bilingualism the country has yet experienced. This was an example of *additive bilingual education*. The political changes, which reduced the incidence of dual-medium schools after 1948, have resulted in a decrease in the level of bilingual proficiency of English speakers. Nevertheless, English- and Afrikaans-speakers continue to have the benefit of mother-tongue education throughout the education system with good provision of the second language.

In the Trends in International Mathematics and Science Study (TIMSS) 2003, mother-tongue speakers of Afrikaans and English performed at the

international average, whilst the scores of students who took the test in their second language were so weak that the national average for South African results placed this country last (Reddy, 2005).

In 1997, a new government declared 11 languages as official languages in a democratic constitution, and then introduced further changes to policy. Although this language policy gives prominence to greater use of African languages, in reality, the responsible education ministry and department ignore the policy and have established an even earlier transition to English. The 78 per cent of students who have African home languages switch to English after three years while, ironically, English- and Afrikaans- speakers continue benefit from mother-tongue medium education as they did during the colonial and apartheid eras. The gap in educational achievement, predictably, continues to widen (Heugh, 2003).

What these examples confirm

What each of these examples, separately and collectively, tell us is that African languages can be used as languages of education to the end of primary school. They can also be developed for use in secondary and even tertiary education. If nuclear physics can be taught through Afrikaans in South Africa, it is technically possible for every African language to be used at this level of academic education.

The Somali, South African, Guinean and Ethiopian examples are particularly instructive. Where there is political will, provision of mother tongue or local language development is feasible in Africa, and can be effected over a relatively short period. These examples show that cost is not a prohibitive factor for the achievements occurred with minimal expenditure. A further lesson, from South Africa and Guinea-Conakry, is that where communities do not believe that they have been adequately consulted and where an undemocratic government implements policy, the successful implementation is short-lived.

The Nigerian and South African cases provide other critical evidence. African children achieved considerable academic success during both the Six Year Yoruba programme (Bamgbose, 2000a) and the eight-year mother-tongue programme (followed by transition to English and sometimes Afrikaans) (Heugh, 2003). In each case, the mother tongue was used as medium of instruction and English was taught as a subject only, but by teachers proficient in the language. By the time students were required to switch medium to English, they had kept up with the academic requirements of the rest of the curriculum and they had

sufficient proficiency to switch to English. To date, there is no example in Africa of a successful mainstream education programme, which uses a transition from the familiar to unfamiliar language in under six years.

Conclusion

The arguments in this chapter attempt to illustrate how, in the earlier absence of reliable information and advice, education decisions have continued to converge towards early-exit transitional language models. These models cannot offer educational success. Many of the language education experts, advisors and consultants who work in African countries are themselves inadequately equipped to offer advice. We now have to take collective responsibility to set things right. We now have incontrovertible evidence, which shows us both the location of the systemic weakness and the appropriate strategies to transform the situation. Subtractive (submersion) and early-exit transitional models are not based on sound theory or research evidence which, if sound, would show how children learn language and use language for learning in formal education. This means that these models have a built-in design flaw. Learning language informally is different from learning language for use in academic contexts. Successful education requires mother-tongue-medium education throughout, but an absolute minimum of six to eight years of mother-tongue (or language closest to the mother tongue) medium of instruction. It can also include the teaching and learning of a second language for use as a second, complementary medium, for up to, but no more than 50 per cent of the day from the seventh year of school. Successful education everywhere requires mother-tongue based systems. In Africa, this means African-language-based systems. The end target of school cannot be the former colonial/official language only. The target must be a high level of proficiency in at least two languages – that is, academic bi- or trilingualism which include the mother tongue (or a language closest to this) plus an international language of wider communication (French, Portuguese, Spanish or English).

Recommendations

- Governments need to develop a communication or advocacy strategy which both informs and engages communities in language and education debates. The purpose is to ensure that civil society is provided with the information about the critical role of both African languages and other languages of wider communication for successful and sustainable development of literacy, success in education and national development.
- b. Governments need to build onto existing provision of African languages as the primary medium of instruction in primary school systematically over the next five years.
- c. African languages should be used as the primary medium of instruction to at least the end of year/grade six (preferably for eight years and, ideally, to the end of secondary school). (See also the Ten-Point Plan in Chapter 6.)
- d. Governments, at the same time, need to improve the provision of the international language of wider communication (English, French, Portuguese or Spanish), alongside the relevant African language/s in each country.
- e. The international language of wider communication should be seen as a supportive medium of instruction during secondary school, but not the only medium of instruction.
- f. Wherever possible or relevant, a third language of national or regional significance should be included in the education system of each country.
- g. Evaluations of literacy, language and education models should track student performance to at least year/grade five, preferably to year/grade six.
- h. Evaluations of literacy and language education programmes should correctly identify the kind of programme (i.e. straight L2 only/subtractive; early-exit transition to L2; late-exit transition to L2; additive bilingual).
- i. Evaluators who are tasked with evaluating language and literacy programmes in African settings should have appropriate expertise in biliteracy and bilingual development throughout primary school; language acquisition and/or psycholinguistics; applied linguistics; and knowledge and

experience of education in predominantly multilingual/minority language settings.

j. Additive bilingual (or trilingual) education should become a common feature of education in national development and a common feature of education and development across the African continent.

Chapter 3

Teaching practices – teaching in a familiar language

Hassana Alidou and Birgit Brock-Utne

The main purpose of this Chapter and Chapter 4 is to address teaching and learning issues faced by African teachers and students in schools and classrooms that use languages that they do not master as languages of instruction. Minimal observational studies are conducted in African classrooms in order to show how teaching impacts on learning. By focusing on teaching practices, we hope to fill this gap. Therefore, in this chapter we have put more emphasis on teaching practices in both regular classrooms (here English and French are the exclusive languages of instruction) and bilingual classrooms in order to show how the use of languages familiar to teachers and students impact positively on teaching practices in bilingual classrooms. We examine the teaching practices in order to determine the types of reform and innovations that ministries and departments of education must undertake in order to empower African teachers. After all, effective learning (the focus of Chapter 4) will not take place without qualified teachers.

The studies reviewed from Burkina Faso, Mali and Niger in francophone Africa and from Ghana, Malawi and Tanzania in anglophone Africa indicate that the use of learner-centred pedagogy is facilitated by the use of a language that both teachers and pupils understand. The use of national languages as languages of instruction helps pupils to become more motivated and involved in learning activities. They communicate better with their teachers and among themselves. Excerpts of teacher-students interactions in African classrooms show clearly that the implementation of learner-centred pedagogy is difficult when the language of instruction (in this case English) is not familiar to children.

Education language policies and teachers' professional backgrounds significantly influence teaching practice and student learning (Mchazime, 1995; Kaphesi, 2003). Studies related to language of instruction issues in post-colonial Africa unanimously suggest that the maintenance of languages such as English, French and Portuguese as dominant or exclusive languages of instruction creates teaching and learning problems in African schools. Such policies are implemented in contexts where few people, particularly children, can speak these languages. This situation accounts largely for the serious communication and learning problems faced daily by both teachers and students in African classrooms. Teachers have much difficulty presenting subject matter in languages in which they have little competence. In most African countries, teachers are expected to teach children to read and write in a language unfamiliar to children (Erny, 1972; Bamgbose, 1984b; Ouane, 1995; Alidou, 1997; Moumouni, 1998; Heugh, 2000; Brock-Utne, Desai and Qorro, 2004; Bamgbose, 2005).

Classroom observation studies conducted in several countries in Africa (Benin, Botswana, Burkina Faso, Ethiopia, Ghana, Guinea-Bissau, Mali, Mozambique, Niger, South Africa, Tanzania and Togo) reveal that the use of unfamiliar languages forces teachers to use traditional and teacher-centred teaching methods. 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 language of instruction, teachers are also forced to use traditional teaching techniques such as chorus teaching, repetition, memorisation, recall, code-switching and safe talk (Alidou, 1997; Hovens, 2002; Alidou, 2003; Brock-Utne, Desai and Qorro, 2003; Rubagumya, 2003; Brock-Utne, 2005c). In our subsequent chapter we provide an illustration of the teacherstudent communication going on in a classroom where a language – foreign to both the teacher and the students – is used as the language of instruction. In contrast, we provide an example from another classroom where the teacher teaches the same topic through a language familiar to both herself and the students.

To help children understand what they are saying in the language of instruction and/or to encourage them to speak and participate in classroom activities, teachers frequently use a strategy we call code-switching (i.e. switching between students' home language and the official medium of instruction). Teachers know that using code-switch as a teaching method is not permissible, yet most of them still do so. In Tanzania, the language of instruction in primary school is Kiswahili. The National Kiswahili Council in 2004 estimated that 99 per cent of Tanzanians speak Kiswahili either as their first or second language. In secondary school, the language of instruction is English, a foreign language only spoken as an official language and used as language of instruction by less than 5 per cent of the Tanzanian population. Halima Mwinsheikhe, who has worked as a biology teacher in Tanzanian secondary schools for many years, admits:

"I personally was compelled to switch to Kiswahili by a sense of helplessness born of the inability to make students understand the subject matter by using English" (Mwinsheikhe, 2002: 16).

This "admission" suggests that teachers who use a code-switching strategy do so with a bad conscience as they are knowingly eliding the official guidelines stating that it is not to be used. In reality, however, the use of such a strategy may be the best way to help students understand subject matter when teaching in a language with which the student is unfamiliar. A study by Mwinsheikhe (2003) found that many of the school inspectors interviewed were well aware that teachers used code-switching. A school inspector interviewed noted:

"When I am inspecting a lesson I am aware of the fact that the teacher is "staging an English only lesson" because I can hear some Kiswahili used in another class" (Mwinsheikhe, 2003: 139).

Teachers also use code-switch strategies to create a more relaxed atmosphere in class. One of the secondary school teachers interviewed by Mwinsheikhe (2002: 56) said, "I sometimes use Kiswahili to make students smile or laugh once in a while, which is good for learning".

Mwinsheikhe (2002) conducted research to find out the extent to which Kiswahili is "unofficially" used by both students and teachers in the teaching of science in Tanzanian secondary schools. Using data derived from observation and interviews she found the majority of the 68 (74 per cent) teachers interviewed acknowledged the existence of a language problem in the teaching/learning of science. Only a small proportion -20 (22 per cent) - asserted that they faced no problem. Most teachers -82 (89 per cent) - admitted using Kiswahili during their teaching, while only 9 (10 per cent) said they did not do so. It was interesting to note that some of the teachers who claimed to have no language

problem indicated that they, in spite of official policy, still used Kiswahili in their teaching. Responding to the question "What lesson activities prompt you to switch to Kiswahili?", 70 teachers (82 per cent) admitted using Kiswahili during lessons. These same teachers said they use this strategy to clarify difficult and or key concepts in the lessons. Thirteen teachers (15 per cent) mentioned using this same strategy to give instructions for practical work and assignments.

According to Rubagumya (2003), teachers and students rely on "safe talk" during classroom interaction when the language of instruction is not familiar. "Safe talk" is characterised by "the encouragement of chorus answers from pupils, repeating phrases or words after the teacher and copying notes from the blackboard" (Rubagumya, 2003: 162). Teachers compensate for their limited proficiency by using "safe talk". To illustrate this point, Rubagumya (2003: 162) provided an example of the use of safe talk in a classroom where English is used as language of instruction at Standard 2:

"Safe talk"

"Teacher: number twelve ... let us go together ... one two three.

Pupils (Chorus): The doctor and his wife has gone out

Teacher: The doctor and his wife has gone out

Kevin: The doctor and his wife have gone out

Teacher: The doctor and his wife have gone out... is the correct?

Pupils (chorus): YEES!"

If not carefully analysed, the dialogue presented above seems to indicate that active learning is taking place. Unfortunately, this is not the case. A discourse analysis shows that repetition and guessing are more involved in this interaction. The fact that there is interaction between a teacher and students does not necessarily mean that meaningful learning is taking place. Due to language barriers, teachers construct materials, lessons and tests that lend themselves to repetition, memorisation, guessing and regurgitation. Students spend hours memorising lessons for the test instead of trying to understand the meaning of what they have read. Effective teaching involves teachers' use of quality questions. Effective questioning emphasises higher level (or more complex) thinking and leads to effective learning on the part of the student. Such questioning is only possible when conducted in a language familiar to the students.

The use of unfamiliar languages also leads teachers to the use of coercive measures to force children to speak in the language of instruction. During the colonial era, teachers shamed African pupils for using their mother tongues. According to Moumouni (1998), children who were caught speaking their mother tongue even during recess were beaten and they had to wear "a symbol" around their neck indicating their incompetence. Unfortunately, this practice continued in francophone Africa even during the post-colonial era. It was, however, prohibited by the ministries and departments of education in the early 1980s. Unfortunately, due to lack of enforcement of the policy, it is still possible to catch some frustrated teachers using such coercive measures against pupils who have difficulties expressing themselves in the official language used as language of instruction (French). In a subsequent chapter we give an example of a coercive measure used by a Tanzanian teacher teaching her students through the medium of English. She punishes the students by having them stand up if they are not able to answer her questions. The teacher never uses this strategy when she teaches the children in Kiswahili.

Often teachers equate lack of adequate proficiency in the language of instruction with laziness, lack of intelligence or an uncooperative attitude on the part of the students. This type of attitude can seriously inhibit students and create anxiety related to language learning and learning in general. To avoid being shamed in front of their classmates, some students refrain from volunteering to answer in class. This attitude is commonly observed among girls in Africa. Female pupils try their best to avoid being ridiculed in the classrooms. Therefore, girls often avoid speaking if the language of instruction is unfamiliar to them. Smith (2003) suggested that corporal punishment and frustration are among the main factors that explain school disaffection among children, and the high drop-out rates in Africa.

Though teachers understand the difficulties their students experience in learning subject matter in a medium of instruction that is foreign to them, there seems to be little emphasis within teacher training in Africa on this problem. In an overview of in-service education for teachers in Ghana, Addabor (1996) noted that the curriculum covered in the so-called "Pupil Teacher Centers" was English, arithmetic and methods (pedagogy). He also stated that there was no training in mother-tongue instruction or in bilingual teaching methodology. Teachers who were trained, but not formerly certified had their work inspected after some years of teaching and were awarded certificates based on inspectors' recommendations. Since 1987, a six-week course has taken place for this group of teachers, on a residential basis. The curriculum again covers English, arithmetic and teaching methods. There are no courses offered in mother-tongue teaching, bilingual teaching or strategies to use when teaching in a foreign language. Ngu (2004) conducted an assessment of teacher-training institutions in Africa on behalf of UNESCO. He concluded that teacher-training programmes were developed before most African countries gained political independence. This implies that student teachers are being prepared to teach in languages which are unfamiliar to children (English, French, Spanish and Portuguese). This, as noted throughout this report, largely accounts for the recurrent educational problems faced by African children and the ineffectiveness of formal basic education.

Language use and teaching practices in bi/multilingual education programmes

As previously mentioned, many African countries renewed their interest in promoting their national languages as media of instruction as one of the central aspects of their reform of basic education after the World Conference on *Education for All*. In this context, few countries have developed or revitalised the use of mother tongues within a bi/multilingual educational framework.

The chapters preceding this also note the positive outcomes related to bi/ multilingual education in Africa with the use of mother tongues in basic education. Further evidence of this is illustrated by teaching practices. There are several examples of studies of educational models that have adopted effective teaching practices in African countries (see Fomba *et al.*, 2003; Ilboudo, 2003; Sampa *et al.*, 2003; Dembélé and Miaro-II, 2003). These models are in place in Burkina Faso (*Écoles Bilingues*), in Mali (*Écoles de la Pédagogie Convergente*) and in Zambia (Zambian Primary Reading Programme). Evidence from these studies shows that the use of mother tongues as languages of instruction facilitates the implementation of child-centred pedagogy. A comparative study conducted by the Ministry of Basic Education and GTZ (Bergmann *et al.*, 2002) indicates that interaction patterns are slowly emerging in both traditional classrooms (or conventional schools, which are the main model schools inherited from the colonial era) and bilingual classrooms due to teachers' use of active learning strategies. However, in the same study Bergmann *et al.* (2002) reported that this particular teaching style is more prevalent in experimental bilingual schools where both teachers and students are able to use a familiar language. Bergmann *et al.* state:

"De manière générale, les enseignants ne monopolisent pas la parole. Ils laissent les élèves s'exprimer très souvent au CI [first year] et parfois dans les autres classes. Jusqu'au CE2 [fourth year], le maitre ET [écoles traditionnelles] le fait nettement moins que son homologue EE [écoles expérimentales] " (Bergmann *et al.*, 2002: 63). [In general, teachers do not do most of the talking. They let the pupils express themselves very often in the elementary classes and sometimes in the other classes as well. Up to the fourth year of primary school the traditional school teacher does it a lot less than his peers in the experimental schools.]

Figure 3.1 The teacher encourages pupils to justify their responses (Bergmann *et al.*, 2002: 64)

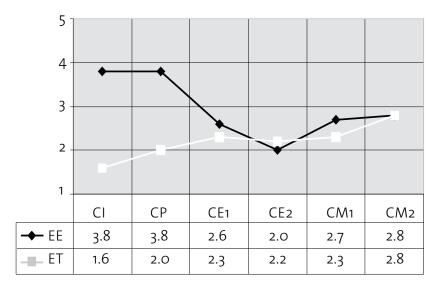


Figure 3.1 graphically illustrates experimental bilingual teachers (EE) and conventional schoolteachers (ET) communication patterns in the classrooms namely, CI (first year), CP (second year), CE1 (third year), CE2 (fourth year), CM1 (fifth year) and CM2 (sixth year). It clearly shows that the use of a familiar

language in first and second years influences active participation from the students. It also indicates that when French is introduced as the main language of instruction in the third year (CE1) both traditional and bilingual teachers went back to the use of teacher-centred pedagogy. They requested fewer answers or participation from their students.

To optimise teaching and learning in bilingual schools, the Ministry of Basic Education in Niger and GTZ decided to revise the model of bi/multilingual education, which had been implemented since 1973. In 2001, it was suggested that Niger move from the implementation of transitional bilingual models to more appropriate bilingual models that maintain the use of national languages as languages of instruction throughout primary school. The proposed model is presented in Table 3.1.

Table 3.1

Suggested percentage of time allocated to national languages and French in pilot bilingual schools (Government Decree on Teaching in Bilingual Schools, 2001; Chekaraou, 2004: 42)

| Grades | National languages | French |
|--------------------|--------------------|--------|
| 1st grade | 90% | 10% |
| 2nd grade | 75% | 25% |
| 3rd and 4th grades | 60% | 40% |
| 5th and 6th grades | 50% | 50% |

The World Bank (2004) highlighted Mali as one of the African countries where learning in public schools is improving. It states that "bi/multilingual education in multilingual countries improves school attendance, reduces dropout rates, and has cumulative advantages for student learning" (World Bank, 2004: 2). This finding is corroborated by several other studies, which examined the effectiveness of *Pédagogie Convergente*, a transitional bilingual programme whose main purpose is to produce functional bilingual learners (Traoré, 2001; Woolman, 2001). In *Pédagogie Convergente* schools, five national languages (Bambara, Fulfulde, Sonrai, Tamajaq and Dogon) are used as a means of instruction, along with French.

Table 3.2

Time allocated to teaching national languages and French in Pédagogie Convergente schools in Mali (adopted from Traoré, 2001: 12)

| | Grade 1 | Grade 2 | Grade 3 | Grade 4 | Grade 5 | Grade 6 |
|---------------------------|---------|---------|---------|---------|---------|---------|
| National language (NL) | 100% | 75% | 25% | 25% | 50% | 50% |
| French | | 25% | 75% | 75% | 50% | 50% |

In Pédagogie Convergente Schools, instruction in mother tongues prevails in both first and second years. French is introduced in its oral form at the end of the second year. The written form of French is not introduced until the child is able to write in the mother tongue; thereafter, there is a drastic increase in the use of oral and written French from year three through year four. Table 3.2 clearly indicates that Mali is moving from the implementation of an earlyexit transitional bilingual model where mother tongues are quickly replaced by French before children develop satisfactory literacy in their first language to the promotion of a maintenance bilingual model. This second option can influence the development of additive bilingualism and bi-literacy among primary schoolchildren. In addition to the use of national languages, Mali is in the process of fully Africanising its curriculum. Teachers develop learning activities that reflect agrarian pastoral life, sports, arts and cultural expression (Woolman, 2001: 38). Pédagogie Convergente involves 345 schools and 45,000 pupils. According to Traoré (2001) the bilingual model was adopted after several evaluations related to the use of mother tongue revealed that the use of mother tongue in itself cannot guarantee teaching and learning effectiveness. He states:

"Through these evaluations we observed that, when a child learns in his mother tongue, although it is easier for him to learn, this is not enough to guaranty optimum competency in the use of national languages in teaching. In order to fully exploit all the advantages linked to the use of national languages in teaching, it is also necessary that the teaching method used be efficient and that training materials are appropriately suited" (Traoré, 2001: 5).

To optimise teaching and learning in mother tongues, Traoré suggested that Mali needed to adopt a more effective bi/multilingual education model. The maintenance of mother-tongue instruction throughout primary school is necessary to help children develop successful functional literacy in their mother tongue and French. Malian educators also thought that it was necessary to revise the language teaching methods. In addition, the Ministry of Basic Education is producing appropriate teaching and learning materials in national languages and French. Just like Niger, Mali is moving towards the implementation of a balanced bi/multilingual education model. Such a model is associated with positive outcomes for teachers and students. This model promotes additive bilingualism and literacy in children's first and official language used as the language of instruction. The maintenance of mother tongues (Bambara, Fulfulde, Sonrai, Tamajeq and Dogon) throughout the primary school years allows children to develop adequate literacy skills in their mother tongue or familiar language. With effective teaching, they can more easily transfer literacy skills developed in the familiar language into the acquisition of and development of literacy and academic skills in the official language used as language of instruction (French).

Another innovation introduced in Mali is the inclusion of tests in national languages along with other tests (reading, writing, mathematics and social sciences) administered in French. This innovation establishes the importance of national language instruction in more formal basic education for both teachers and students in Mali. It also contributes to solving the problem of hasty transition to French instruction. This change can help reduce teachers' and students' fears of lagging behind monolingual school pupils who are taught exclusively in French from the first year onward (Traoré, 2001).

Écoles Bilingues from Burkina Faso are also presented in the recent literature as a new success story (Nikièma, 1999; Ouédraogo, 2002). *Écoles Bilingue* is a late-exit transitional bilingual programme that lasts five years. It maintains the use of national languages even when teachers switch to teaching in French in the fourth and fifth years of schooling (see Table 3.3).

Table 3.3 Écoles Bilingues: time allocation for languages of instruction (Ouédraogo, 2002: 14)

| First year | National language (90%) | French (10%) |
|-------------|-------------------------|--------------|
| Second year | National language (80%) | French (20%) |
| Third year | National language (50%) | French (50%) |
| Fourth year | National language (20%) | French (80%) |
| Fifth year | National language (10%) | French (90%) |

Écoles Bilingues teachers receive regular school-based pedagogical support from University of Ouagadougou linguists and they are familiarised with first and official language used as language of instruction. The *Écoles Bilingue* pupils, however, are older children who have not had the chance to be enrolled in formal primary schools. These children are nine years old or older and they have developed full language and cognitive skills in their mother tongues before enrolling in *Écoles Bilingues*. In this regard, their profile is quite different from the younger children attending traditional primary schools. Linguists train *Écoles Bilingues* teachers to use a method used in adult education to teach functional literacy in both national languages and French.

Internal evaluations of the *Écoles Bilingues* project indicate that after five years of instruction pupils from this project are ready to take the end-of-primary school examination. The results of the 2003 and 2004 achievement tests showed that *Écoles Bilingues* pupils performed better than pupils attending monolingual schools where the language of instruction is French (Ouédraogo, 2002).

For the promoters of *Écoles Bilingues*, being successful in the end-of-elementaryschool examination is certainly celebrated. However, this is clearly not the only factor that defines educational success within this bi/multilingual education system. The concept of educational success is broadened to include attaining grade-level functional literacy and a knowledge base that children and young adolescents can use to participate actively in all socio-cultural and economic activities. Another important goal of *Écoles Bilingues* is to help children develop positive cultural values and become citizens who are more tolerant.

Ilboudo (2003) and Ouédraogo (2002) also indicated that the use of national languages facilitates the implementation of child-centred pedagogy in classrooms and parental involvement. Bilingual teachers who have utilised active learning pedagogy develop community-based projects that encourage hands-on activities and parental involvement. In light of this report, one can argue that effective teaching in the national language can help convince disenfranchised parents and students about the value of school. In Niger, fathers are particularly in favour of bilingual schools for similar reasons:

"Ces parents, surtout les pères, trouvent que l'enseignement en langues nationales est meilleur que le système traditionnel, parce que l'apprentissage des enfants est facilité. Ils ne veulent pas que les écoles expérimentales passent au système traditionnel. La grande majorité veut garder l'EE (école expérimentale], et cela pour trois raisons principales : la valorisation de sa propre culture, une meilleure compréhension des leçons, et un meilleur apprentissage de la lecture et de l'écriture dans les deux langues" (Bergmann *et al.,* 2002: 96-97). [These parents, especially fathers, find that teaching in African languages is better than the traditional system because children learn easily. They do not want experimental schools to cross over to the traditional system. The big majority of them want to keep the experimental schools for three major reasons: the development of its own culture, better comprehension of lessons and better learning of how to read and write in the two languages.]

Comparative studies of monolingual traditional schools (which use official languages such as English, French, Spanish and Portuguese as languages of instruction) and bilingual schools (which use the languages the pupils speak as well as the official languages) show that bilingual students generally tend to perform better academically than their monolingual counterparts (Alidou, 1997; Ouédraogo, 2002; Bergmann *et al.*, 2002; Mekonnen, 2005). An extensive review of the impact of the use of familiar language on students' ability to learn and perform is provided in the next chapter. We illustrate the point here by presenting the case of Ethiopia.

In Ethiopia, the education and training policy of 1994 stipulates the medium of instruction for different levels of education (see Table 3.4). This policy reflects significant changes from those of imperial Ethiopia discussed earlier in the report.

Table 3.4

National policy on language of instruction by level of education (Ministry of Education of Ethiopia, 1994)

| Level of education | | National policy on language of instruction |
|--------------------|--|--|
| I. | Primary EducationI cycle (year 1-4)II cycle(year 5-8) | Mother tongues |
| 11. | Secondary EducationI cycle (year 9-10)Preparatory (year 11-12) | English |
| 111. | Primary Teachers' EducationPTE for I cyclePTE for II cycle | Mother tongues |
| IV. | Secondary Teachers' education | English |

Table 3.4 shows that there is policy congruence of the language of instruction used in the primary and secondary educational levels and the languages of instruction used in the primary and secondary teachers' education. Mekonnen (2005) has, however, found that the national policy is not followed in actual practice. Table 3.5 illustrates this point; it shows how languages of instruction were actually being used in Ethiopia.

Table 3.5

Languages of instruction used in the primary schools and in the primary teachers' education in Ethiopia (adapted from Mekonnen, 2005)

| Educational Level | | Language of instruction | Regional state | |
|-------------------|--------------------------------|---|--|--|
| Ι. | Primary Education | | | |
| | Year 1-4 | Mother tongues | All regions | |
| | Year 5-6 | Mother tongues English | All regions except Gambella Gambella | |
| | Year 7-8 | Mother tongue-Tigrinya Mother tongue-Amharic Mother tongue-Oromifa English | Tigray Amhara Oromiya The other seven regions | |
| II. | Primary Teachers' Education | | | |
| | For year 1-4 | Mother tongues | All regions | |
| | For year 5-8 | English | All regions | |

Notably, this highlights incongruence between the language of instruction actually used at the different levels of education in Ethiopia and those stated in the national policy. In particular, there is incongruence between the second cycle of primary education (year five to eight) and the language of instruction of the teachers' education for the second cycle of primary education (compare Table 3.4 and Table 3.5).

Ethiopia is divided into eleven regions. Four regions (namely Tigray, Somali, Amhara until 2006, and Oromiya) have used their mother tongues as the language of instruction for eight years. Three regions use a combination of six

and eight years of mother tongue education (Harari, Amhara since 2006, and Dire Dawa). Two regions, Addis Ababa and Afar, use Amharic as a medium for six years. Amharic is the mother tongue for about half of the students in each of these regions, which means that 50 per cent of students in these regions have Amharic as a second language medium. Benishangul Gumuz also offers Amharic as a second language medium for six years followed by a transition to English. Southern Nations, Nationalities and Peoples' Region (SNNPR) used eight languages for six years of mother-tongue medium until 2004, and since then has used twelve languages as mother-tongue medium education for four years. One region, Gambella (closest to the Sudan), uses mother tongue for four years. Because of the range of language models and time periods in which the mother tongue and or the regional language of wider communication is used as medium in primary school, Ethiopia provides an interesting case to study (see Mekonnen, 2005; Heugh et al., 2007). How well do students who use mother tongues as language of instruction for four, six or eight years of primary school perform in science and technology subjects like mathematics, biology and chemistry? How well do students who use a foreign language in this case English – as language of instruction from year five or year seven perform in the same subjects? Since 2000, the Ethiopian Ministry of Education has undertaken regular system-wide assessments of student achievement at year four and year eight. In 2000, one region, Somali, did not participate in the assessment. The data from the grade eight assessment is presented below in Table 3.6

Table 3.6

Mathematics, biology and chemistry mean achievement scores by language of instruction, (Ministry of Education of Ethiopia, 2001)

| | Region | Language of instruction (years 7-8)* | Sample Number | Maths | Biology | Chemistry |
|----|-------------------------------|--|------------------|-------|---------|-----------|
| 1 | Tigray | Tigrinya | 390 | 45% | 56% | 47% |
| 2 | Amhara | Amharic | 580 | 44% | 61% | 45% |
| 3 | Oromiya | Oromifa | 598 | 40% | 56% | 45% |
| 4 | Harari | English | 372 | 40% | 48% | 43% |
| 5 | Addis Ababa | English | 548 | 39% | 44% | 40% |
| 6 | Benishangul Gumuz | English | 268 | 36% | 43% | 41% |
| 7 | Dire Dawa | English | 377 | 37% | 41% | 39% |
| 8 | SNNPR | English | 1 235 | 36% | 43% | 36% |
| 9 | Afar | English | 394 | 36% | 39% | 36% |
| 10 | Gambella | English* (years 5-8) | 400 | 27% | 37% | 33% |
| | Total | | 5 163 | | | |
| | Average of the Mean Scores | | | 38% | 37% | 41% |

Table 3.6A

Achievement scores from Table 3.6 shown by rank by region

| | Region & Language of Instruction | Maths Rank | Biology Rank | Chemistry Rank |
|----|-------------------------------------|---------------|-----------------|-------------------|
| 1 | Tigray/Tigrinya | 1 | 2 | 1 |
| 2 | Amhara/Amharic | 2 | 1 | 2 |
| 3 | Oromiya/Oromifa | 3 | 2 | 2 |
| 4 | Harari/English | 3 | 3 | 3 |
| 5 | Addis Ababa/English | 4 | 4 | 5 |
| 6 | Benishangul Gumuz/English | 6 | 5 | 4 |
| 7 | Dire Dawa/English | 5 | 6 | 6 |
| 8 | SNNPR/English | 6 | 5 | 7 |
| 9 | Afar/English | 6 | 7 | 7 |
| 10 | Gambella/English | 7 | 8 | 8 |

Tables 3.6 and 3.6A show that students whose language of instruction is their mother tongue have scored higher in the three subjects mentioned above than students who switched to English medium education earlier than year/grade eight. English is a de facto foreign language in Ethiopia (Mekonnen, 2005), using statistical analyses, found that there is a significant difference in the performance between those students taught in their mother tongue and those students taught through a foreign language. The mean achievement scores demonstrate that students who study mathematics, biology and chemistry in the seven regions where English is used as a medium of instruction by year/ grade eight perfom lower and are thus disadvantaged compared to the students who study with their respective mother tongues as medium of instruction throughout primary education (Mekonnen, 2005). In fact, the students scoring the lowest in these subjects, so important for the development of science and technology, are from Gambella, the region where they start using English as the language of instruction as early as fifth year. Table 3.7 illustrates students' performance in English in the ten regions of Ethiopia which participated in the 2000 assessment.

Table 3.7 English achievement in year eight by regions (Ministry of Education of Ethiopia / NOE, 2001)

| | Region | Language of Instruction (Lol) | Sample Number | English Achievement score | Rank | Year of transition to English as Lol |
|----|----------------------|----------------------------------|------------------|---------------------------------|------|--|
| 1 | Tigray | Mother tongue (MT) -Tigrinya | 390 | 39% | 4 | Never (MT throughout) |
| 2 | Amhara | Mother tongue –Amharic | 580 | 34% | 7 | Never (MT throughout) |
| 3 | Oromiya | Mother tongue –Oromifa | 599 | 39% | 4 | Never (MT throughout) |
| 4 | Harari | Foreign Language -English | 372 | 45% | 2 | 7-8 |
| 5 | Addis Ababa | Foreign Language -English | 548 | 46% | 1 | 7-8 |
| 6 | Benishangul Gumuz | Foreign Language -English | 268 | 40% | 3 | 7-8 |
| 7 | Dire Dawa | Foreign Language -English | 377 | 39% | 4 | 7-8 |
| 8 | SNNPR | Foreign Language -English | 1 235 | 37% | 5 | 7-8 |
| 9 | Afar | Foreign Language -English | 394 | 34% | 7 | 7-8 |
| 10 | Gambella | Foreign Language -English | 400 | 36% | 6 | 5-6 |

Table 3.7 shows the average English achievement score of the ten regions (and the year of primary school when the language of instruction changes to English) and found it to be 39 per cent. Of the three regions using mother tongues as language of instruction for the entirety of elementary education (years/grades one to eight), only students from the regional state of Amhara (34 per cent) scored below the average English achievement score. Students in the other two regions that use mother tongue for education throughout primary school, Tigray and Oromiya, have scores equal to the average of 39 per cent. Out of the seven regions using English for the final two years of primary school, three regions (Harari, Addis Ababa and Benishangul Gumuz) scored above the average, (45 per cent, 46 per cent and 40 per cent respectively). Both in Harari and Addis Ababa children are more exposed to English on a daily basis than in most other regions. One region that also switches to English instruction for the final two years of primary education, Dire Dawa, scored equal to the average (39 per cent). Three other regions, SNNPR, Afar and Gambella, scored below the average (37 per cent, 34 per cent and 36 per cent respectively). It is interesting to note that Gambella, the only region among the ten which starts using English as the language of instruction at the earliest stage, year/grade five, is the region where students have the second lowest score in English, next to Amhara, which as noted above, uses mother-tongue education throughout and Afar which switches from Amharic (the second language for at least half of the students in this region) to English in year/grade seven.

Based on the results noted above, the Ethiopian government/USAID (2001) study made the following conclusions and recommendations:

"Schools in areas where English is the primary language of instruction for grade 8 don't have as high a level of achievement, even in the English language, as schools in areas that use the major languages. **Special effort needs to be devoted to strengthening the English language skills of teachers**" (Ministry of Education of Ethiopia / NOE, 2001: 102, emphasis added).

This conclusion is most surprising for two reasons. First, Table 3.7 shows higherthan-average (39 per cent) achievement in English scores for three regions that switch to English in years/grades seven to eight. Second, the *logical* recommendation would be to extend, to eight years, the use of mother tongue as the language of instruction in all ten regions and not only in Tigray, Amhara and Oromiya. The government study concludes that it is the lack of English language skills for teachers that is the problem rather than the fact that teachers are forced to teach in a language which students do not understand. Students learn better when they understand what the teacher is saying. Another conclusion from the same report further highlights different interpretations of the findings reported above:

"With the exception of English, the Regions display a similar pattern of achievement across regions—Tigray, Amhara, Oromiya, and Harari attaining the highest scores, while Gambella and Afar regions have the lowest scores. **Performance on English achievement appears to be supported by the use of English as the instructional language**" (Ministry of Education of Ethiopia / NOE, 2001: 10, emphasis added).

This statement, however, is not true. If one looks at the results in Table 3.6, 3.6A and Table 3.7, one sees that students from Gambella, the region which starts the earliest with the use of English as the language of instruction, not only has lower test scores in English than the students in Tigray and Oromiya, but also the lowest scores in mathematics, biology and chemistry. The students in Tigray and Oromiya have their mother tongues as instructional languages all through the eight years of primary school. The students from Tigray and Oromiya do not use English as an instructional language at all but they learn it as a foreign language and have maintained average or near average English test scores with the other regions and the highest test scores in the sciences. The results clearly illustrate that the use of English as a language of instruction does not have a statistically significant effect on the students' English mean achievement scores, but mother tongue instruction throughout the primary clearly improves science achievement scores.

The Ethiopian situation provides solid evidence that the use of familiar languages helps children to learn and perform better in schools, but often the use of these languages is complicated by policy incongruence. Policy incongruence and misinterpretation of data, as discussed above, seriously undermines the potential of bi/multilingual education. It is noteworthy that subsequent to the ADEA Biennale in 2006 when this report was presented to the ministers of education, the Ethiopian Minister of Education called for a comprehensive study of the medium of instruction in Ethiopia (see Heugh *et al.*, 2007). In the next section, we examine some of the critical problems that must be addressed to optimise teaching and learning in bilingual schools.

Issues in bi/multilingual schools

Nadine Dutcher reminds us that:

"The outlook for successful education is brighter when the school builds on the foundation of mother tongue in teaching a second and third language. Such is the promise of mother-tongue education. But there are perils as well. They include the possibility of ineffective teaching for a number of reasons and lack of support for mother tongue on the part of teachers, parents and governments" (Dutcher, 2004b: 1).

Transitional bilingual programmes that advocate early-exit from mothertongue instruction are prevalent in Africa (Alidou and Garba, 2003). Studies related to these programmes show that, in most cases, teachers do not clearly understand the phenomenon of bilingualism and how children develop functional literacy. Teachers primarily rely on language teaching methods used in traditional schools. Due to lack of adequate training, bi/multilingual teachers rely on their own experience as learners to teach their students.

In Niger, Chekaraou (2004) found that former traditional school teachers who are transferred to bilingual schools have a negative perception of teacher-student interactions in bilingual schools because they are used to classrooms where they have control of the classrooms due to the use of languages unfamiliar to children. These teachers especially believe that bilingual school pupils who express themselves freely in the classroom are "impolite". Chekaraou (2004:188) asked two bilingual teachers to characterise their students' participation and to share their view about these students' behaviour. Fortunately, trained and experienced bilingual teachers do not share the view of the former monolingual schoolteachers as indicated by the responses given by two bilingual teachers:

First teacher:

"I do not think it is indiscipline. Children feel at ease when in bilingual classes. They make use of their own language. Therefore, they do not feel blocked and intimidated. They understand what they are saying and what they hear from the teacher perfectly. I think it is a freedom of expression and an ease that characterize the behavior of these children" (Chekaraou, 2004: 188).

The second teacher's response is similar:

"It is not indiscipline. In bilingual schools, the children do not feel blocked or intimidated. The teacher is not authoritative, acting like a dictator who imposes everything on the students while they [the students] are not given time to express themselves freely. Now [we make use of] a teaching method consisting of letting the students express themselves freely, go do something practical and receive all the necessary means to explore what is in their immediate environment without imposition. In the bilingual classroom, the teacher guides the students. As a result, children are inquisitive, open-minded and have time and freedom to communicate with and ask clarification questions of their teacher. It is not like in traditional French monolingual schools in which it is the teacher who monopolizes knowledge while children remain inactive, as consumers only. When any visitor who is interested in these bilingual schools visits us, s/he will find children enjoying themselves in the classroom and expressing themselves without any restraint using natural gestures and the words that they already know. On the other hand, those detractors of bilingual schools come here and see how our children engage conversations freely with us and they think no, either the children accept what I tell them or they must shut it up. For them children in the bilingual schools are undisciplined. For us the children's behavior does not have anything to do with indiscipline" (Chekaraou, 2004: 188).

Former monolingual teachers' negative attitude toward pupils' autonomy and active participation in their own learning demonstrates that there is a serious need to help teachers understand the importance of creating a safe learning environment where children can express themselves without any fear. Learning cannot take place in classrooms where children are silenced and stigmatised.

Bi/multilingual education schools throughout Africa are confronted with their heavy reliance on untrained teachers. The majority of bilingual teachers are either mainstream teachers who are enthusiastic about teaching in mother tongues or new graduates from secondary schools who volunteer to teach in the bilingual programmes while they are looking for other employment opportunities. Both categories of teachers receive limited training in teaching mother tongues and they are given responsibility to teach without adequate school-based support (Traoré, 2001; Benson, 2002). Alidou argues that: "Teacher's enthusiasm cannot substitute for qualification required for teaching in mother tongues and official languages. Many bilingual teachers face serious professional challenges. They may be able to speak the language of instruction, but they have not mastered reading and writing in that language" (Alidou, 2003: 112).

According to Traoré (2001), teacher-training programmes should be revised to integrate bi/multilingual education and the training needs of bilingual teachers. It is also imperative that all school supervisors and leaders receive not only administrative training, but also pedagogical training to help them develop a knowledge base about bi/multilingual education and support teachers in these programmes.

In 1968, Malawi adopted a language policy, which promoted Chichewa, one of its languages, as a national language. The main objective of this policy was to promote national unity through a language that the majority of citizens spoke. English, however, was retained as the official language of the country. In schools, Chichewa was used as language of instruction from the first year to the fourth year. English replaces it from fifth year onwards. However, both Chichewa and English are taught as subjects from first year all the way to university. According to Chilora (2000), this language policy has had a positive impact on the development of Chichewa as a language for schooling. The various governments invested significantly in teacher colleges developed special programmes whose main goal is to train teachers in teaching in Chichewa as language of instruction. Textbooks were also produced for all subject matters (language, mathematics and general studies) taught in that language. However, teachers' guides were produced in English to accommodate teachers who did not speak Chichewa well.

The main shortcoming of this policy is that it did not take into consideration all teachers' sociolinguistic backgrounds. Some teachers were not speakers of Chichewa and they served in non-Chichewa speech communities. Therefore, neither the teachers nor the students spoke Chichewa. To help children learn, these teachers were forced to use local languages as language of instruction. This situation caused serious problems for both teachers and students. In this case, children were tested in Chichewa and English and both languages are unfamiliar to them. To remedy this problem, in 1994, the government introduced a new language policy that legitimated the use of local languages – languages familiar to children. The main reason for the shift in education language policy was "to give children an opportunity to participate fully in classroom discussions using a language that they are more familiar with than to struggle in a language that they are just learning" (Chilora, 2000: 4).

Unfortunately, this change of policy was not followed by an appropriate redeployment of teachers. Teachers' sociolinguistic profiles were not necessarily taken into consideration for their placement into schools. The Ministry of Education of Malawi considered instead regional demand for teachers. In addition, textbooks were still in Chichewa therefore teachers had to translate them in many different languages.

Another problem identified by Kaphesi (2003) is the mis-match between the language of study and the language of instruction. Textbooks were written in Chichewa while the teacher's guides were written in English. He argues that this situation creates serious problems:

"Teachers have a problem translating the mathematical vocabulary between English and Chichewa and this brings about pressures and tension among the mathematics teachers who may not find the equivalent terms between English and Chichewa" (Kaphesi, 2003: 277).

The problem highlighted above by Kaphesi shows that for adequate teaching in an African language, teachers should have textbooks and teachers' guides written in the same language. When teachers use African languages to teach subject matters they develop appropriate meta-language in these languages. Such use can also contribute to the modernisation of these languages.

Williams and Mchazime (1999) conducted a study on reading proficiency in Chichewa and English among primary schoolchildren in Malawi. They found that reading, listening comprehension and speaking in Chichewa were much easier for children. The same children performed poorly when tested in English.

The Malawi Institute of Education and Save the Children Federation (USA) conducted a study to determine the impact of the Free Primary Education Policy implemented since 1994 (Chilora, 2000). This was done within the Improvement of the Quality of Education Project (IQE) initiated by UNESCO. One aspect analysed in this study was the impact of the new language policy on children's academic achievement. The results indicated that the use of familiar languages influences better learning on the part of the children.

African children experience lot of difficulty in reading and writing in both their mother tongue and the official languages. This explains why most students do not develop adequate literacy skills after six and seven years of formal basic education. This problem is identified in both monolingual and bi/multilingual schools. Unfortunately, teachers are not trained to detect reading difficulty and, in general, are not adequately competent in teaching reading, writing and literacy. Few countries have explicitly addressed the reading and literacy problems in school. UNESCO, the International Reading Association and the Ugandan Ministry of Basic Education have initiated the "Reading for All Project". The main goal of this project is to help teachers teach reading more effectively and instill the joy of reading among children (Gordon, 2005). Zambia has also tackled the problem of reading and illiteracy among formal basic education pupils by implementing an intensive reading programme called "Breakthrough to Literacy" (Sampa, 2003).

Breakthrough to Literacy is based on child-centred pedagogy, literature-based literacy and promotes writing among children by using their stories as basic reading texts. Parents are also involved in this project and they are required to help their children write their own books. Parents read with their children and they come to school to observe reading and writing sessions. Studies indicate that pupils who benefit from this instruction are developing beyond gradelevel literacy skills in the Zambian languages and they perform at appropriate grade levels in English. In 2002, grade 1 and grade 2 students were tested to determine the effectiveness of the project. Students were administered reading and writing tests in both Zambian languages and English. According to Sampa (2003), in 1999 grade 1 pupils scored 2.1 out of the expected score band of 0-24 for the test administered in Zambian languages. In 2000, grade 1 children who went through the literacy project scored 16.24. This indicates a 780 per cent increase in the ability to read. Second graders also showed an increase of 575 per cent and third to fifth graders demonstrated an increase of 484 per cent.

Pupils also showed that they learned English more effectively through the Breakthrough to Literacy Project. In 1999, grade 1 pupils had 4.8 as a mean score for an English language test. In 2002, their mean score was 16. More concretely, Sampa (2003) observed that children could effectively use both Zambian languages and English to learn. They were able to "read fluently and write clearly and will transfer the skills [literacy] to other subject areas so that they can learn effectively across the curriculum" (Sampa, 2003: 41).

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 teachers' 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 that are destined for instruction through the official or foreign language.

Since the early 1990s, the Capacity Building International, Germany (InWEnt) and GTZ have developed several projects whose aim is to promote effective functional literacy among children and adults in Africa. In Burkina Faso, Mali and Niger, for example, InWEnt has trained more than 70 national textbook authors. InWEnt has also promoted an integrated language teaching approach, which emphasises the development of oral and written language among first, second and third years. The textbooks produced in this project help children develop not only cognitive skills but also meta-cognitive ones, i.e. the ability to think about and learn or know one's own thinking process. It helps them to think about how they learn most effectively, which is applied to reading and language skills acquisition, but also all other subjects. In addition, all the reading texts are based on children's immediate educational needs, immediate culture and other regional cultures. These texts also include cooperative learning activities that encourage children to develop functional and academic literacy. The Ministries of Basic Education from Burkina Faso, Mali and Niger in cooperation with InWEnt and GTZ produced a comprehensive teachers' guide that includes all the national languages used in these three countries (Galdames *et al.*, 2004). This approach has also been implemented by GTZ in ASTEP programmes (Assistance to Teacher Education Project) in Ghana (GTZ, 2003). In the ASTEP programmes, culturallyrelevant textbooks and teachers' guides were produced to help teachers and pupils achieve better performance in, respectively, teaching and developing literacy.

The lack of a literate environment in schools and communities is another critical factor that undermines teachers' efforts to teach literacy in both national languages and official languages used as language of instruction. Most studies related to both traditional and bilingual schools in Africa indicate that one of the serious problems that educators and teachers must address is how to make education and literacy relevant to children and adults. With that in mind, one

would argue that the practice of literacy should be related to the actual use of written language to accomplish all types of academic and social functions. Unfortunately, because of the exclusion of African languages from, particularly, formal oral and written communication in many African countries, teachers and children do not always have the opportunity to use the literacy skills they develop in their mother tongues or national languages in real life situations. This, however, varies from one African country to another. In Tanzania, for instance, most newspapers are written in Kiswahili, which provides opportunities for using and improving literacy skills.

Both GTZ and InWEnt have contributed to the promotion of effective teaching and literacy practices in bilingual schools in Niger, Ghana and Mali. These organisations also supported the respective education ministries' effort to promote literacy and literate culture in national languages. GTZ funded an editorial project in Niger as a follow-up to its bi/multilingual education project, which ended in 2003. The main goal of the project was to facilitate the creation of a literate environment in national languages and a culture of reading among children and adults. Consequently, the project produced reading materials in national languages for children and adults. It also supported, financially and technically, local and regional publishing companies. Other local and regional literacy organisations such as ARED (non-formal education by the NGO Associates in Research and Education for Development) in Senegal, Tin Tua in Burkina Faso, private publishing companies Édition Alpha (Niger) and Édition Ganndal (Guinea) and local authors have been contributing to the development of a literate environment and culture in national languages in Africa (Alidou and Jung, 2002; Glanz, 2004).

Due to lack of adequate training, African teachers do not know how effectively to monitor and assess student learning. One should also point out that the variety of achievement tests administered to pupils is often not valid and reliable. Consequently, one can argue that in African contexts, it is extremely difficult to determine accurately the impact of teaching on students' learning.

An aspect related to school administration that affects teaching practice in bi/ multilingual education is teacher deployment. Often teachers who are nonspeakers of or not literate in particular national languages are posted to areas where such languages are used as language of instruction (Dzinyela, 2001). This situation affects teachers' ability to use adequately the language of instruction and communicate well with their students. Finally, teaching practice is negatively affected by overall socio-political contexts, which are not always in favour of the expansion of the use of African languages as language of instruction in formal education. At the macro-sociopolitical level, this situation is characterised by some international donors' reluctance to support the use of mother tongues throughout the formal education systems (Alidou, 1997, 2003; Malone, 2000; GTZ, 2003). Mother-tongue education is still viewed by many, both educated and un-educated Africans, as second-class education. 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 politically to promote the use of African languages as languages of instruction within bi/multilingual educational programmes.

Recommendations

- a. **Develop multilingual and intercultural teacher preparation programmes.** Support the integration of multilingual and intercultural education philosophies, theories and methodologies in the initial and in-service teacher training programmes. Such an approach will help teachers become familiar with first- and second-language acquisition as well as teaching theories and methodologies. Consequently, the promotion of multilingual and intercultural education programmes in Africa requires a serious revision of the curriculum for teacher preparation programmes.
- b. *Prepare teachers to teach reading and literacy effectively in both first and second languages*. African teachers struggle to teach reading and literacy to young learners. Effective learning cannot take place if pupils do not develop adequate literacy skills in the languages of instruction. Zambia has addressed the literacy issue in schools by promoting the Zambian Primary Reading Programme. This programme has produced positive results. Other African countries must adopt similar strategies in order to help teachers and pupils.
- c. **Instruct teachers how to assess students' progress effectively.** One of the major problems that prevail in African classrooms is the inability of teachers to assess adequately their own teaching and students' progress.

The absence of assessment and evaluation components in the teacher preparation curriculum is a key reason for this situation. Teachers are trained to grade (i.e. score and mark students' assignments) but they are not trained to assess learning and students' progress. Both formative and summative assessment must become an integral part of teacher preparation programmes.

- d. **Training of supervisors.** In order to promote multilingual and intercultural education in Africa, both teachers and their supervisors must develop adequate competencies in multilingual education and pedagogy. Often supervisors are not included in the training programmes, yet they are expected to promote educational reforms, supervise and evaluate teachers. In order to eliminate supervisors' resistance to the promotion of multilingual education and help them to support teachers adequately, they must be offered professional development training related to multilingual and intercultural education. They must also become familiar with first-and second-language acquisition and teaching philosophies, theories and methodologies. Since the supervisory role is both to aid teachers and to evaluate them, they must know the appropriate assessment and evaluation methods used in bilingual and intercultural education.
- e. **Promote qualitative and quantitative studies on teaching in both national and official languages at all levels of instruction in Africa.** It is especially important to conduct observational and ethnographic studies in classrooms, schools and communities to assess the impact of pedagogical innovations promoted in the schools and classrooms. In Africa, limited studies have been produced in this area over the last forty years.

Active students – learning through a language they master

Birgit Brock-Utne and Hassana Alidou

"There is little doubt that the systematic but frequently ignored differences between the language and culture of the school and the language and culture of the learner's community have often resulted in educational programmes with only marginal success at teaching anything except self-depreciation" (Okonkwo, 1983: 377).

The focus of this chapter is the African learner. Had we merged this chapter with the previous one, the learner would easily have disappeared. While the previous chapter focused on the strategies the teacher uses to teach in a situation where neither s/he nor the pupils master the language of instruction well, we shall here look at what is learned in such a situation. We shall also look at learning that takes place when the teacher uses a language with which s/he and the learners are familiar. The most important learning that takes place in a classroom can hardly be measured in test scores since they deal with lasting attitudes to academic learning. For this reason, we have decided to open this chapter with an illustration from an ongoing research project in Tanzania where participant observation is being used to chronicle and assess what goes on when students are taught in a familiar language and when they are taught in a foreign language.

Both this example and the example from Ethiopia from the previous chapter deal with students beyond the first primary years of schooling. They show

that even at somewhat later stages of schooling – the eighth year in Ethiopia, which corresponds to one year of secondary school in Tanzania – students learn better in a familiar language. Examples from the lower level of schooling are taken from Ghana, Mali, Niger, Nigeria and Burkina Faso. The pedagogical principle of going from the familiar to the unfamiliar pertains not only to the language of instruction but also to the content of the curriculum. For example, it is not easy for a child to be exposed suddenly to a decimal system when s/ he is used to other ways of counting, such as those centring around eight or 20 rather than ten. Similarly, it is insufficient simply to translate foreign books and learning materials into local languages. Learning materials should entail content familiar to the child, taken from her or his surroundings and promote pride in their African heritage. Towards the end of the chapter, the focus is on exams; specifically, on the difficulties pupils have when both the language of examination and the content of the curriculum are from a foreign environment. An example from Namibia of monitoring the content of exams for cultural bias is given. The chapter concludes with recommendations to improve learning.

The Education for All (EFA) strategy that was discussed in various chapters of this report was, among other things, meant to target the poor (Brock-Utne 2000; Brock-Utne, 2005a). In an article on EFA, Mehrotra (1998) draws our attention to what he sees as the most important characteristic of those developing countries that really target the poor and have the highest percentage of the population with a completed basic education:

"The experience of the high-achievers has been unequivocal: the mother tongue was used as the medium of instruction at the primary level in all cases...Students who have learned to read in their mother tongue learn to read in a second language more quickly than do those who are first taught to read in the second language" (Mehrotra, 1998: 479).

Yet in the 2000 World Education Forum in Dakar there was, according to Dutcher (2004a), no mention of the language issue in the plenary sessions of the conference. There is also little consideration of the language issue in the resulting documents from the Forum. There is limited reference in official documents to the fact that millions of children enter school without knowing the language of instruction. Many of these children are in Africa. The only type of formal schooling available to these children is in a language they neither speak nor understand.

"It is shocking that the international dialogue on Education for All has not confronted the problems children face when they enter school not understanding the medium of instruction, when they are expected to learn a new language at the same time as they are learning in and through the new language. The basic problem is that children cannot understand what the teacher is saying! We believe that if international planners had faced these issues on a global scale, there would have been progress to report. However, instead of making changes that would lead to real advancement, the international community has simply repledged itself to the same goals, merely moving the target ahead from the year 2000 to 2015" (Dutcher, 2004a: 8).

In most African countries, children have great difficulties learning simply because they do not understand what the teacher is saying. Yet there is some progress being made. Teacher guides are being created and teacher training courses are given to help African teachers become more "learner-centred", which will help them activate their students and engage them in critical thinking and dialogue. Teachers are being asked to abandon a teacher style of rote learning, where students just copy notes from the blackboard, learn their notes by heart and repeat them at tests. Little thought has been given, however, to the fact that a rote learning teaching style might be the only one possible when neither the teacher nor the students command the language of instruction. African countries are generally thought to be anglophone, francophone or lusophone, according to the languages introduced by the colonial masters and still used as official languages. These languages are, however, not the languages spoken in Africa. They are comfortably mastered only by five to 10 per cent of the people. The great majority of Africans use African languages for daily communication. Africa is Afrophone.

As mentioned previously, this chapter uses an example from a field study taking place in a 'language in education' project in Tanzania illustrating how the teaching style is dependent upon whether a familiar or a foreign language is used as the language of instruction. We analyse the type of learning going on in two different classrooms. The ongoing LOITASA (Language of Instruction in Tanzania and South Africa) project (2002 - 2007) noted earlier has some classes in South Africa which, on an experimental basis, are being taught in isiXhosa in some subjects in years four, five and six in primary school (Desai, 2004; Brock-Utne, 2005a). In Tanzania, however, only a shorter experiment, limited to three months (under the auspices of the University of Dar es Salaam) in two secondary schools could be carried out (Brock-Utne, 2005c). In Tanzania, the seven years in

primary school are conducted through the medium of Kiswahili, but secondary and tertiary education are carried out through the medium of English (Brock-Utne, 2005b).

A look into two secondary school classrooms in Tanzania – one taught in Kiswahili – one taught in English

As an experiment, the same teacher was teaching the same topic in biology to two different classes of Form I students in a large secondary school. The teacher (we here call her Mwajabu) taught the topics in English to one class and in Kiswahili to another class. Below is an excerpt from field-notes from August 2004 taken from many hours of observations (Brock-Utne, 2005c). We start with a lesson Mwajabu taught in English and look at what the students learn. We then switch to a lesson Mwajabu taught in Kiswahili on the same topic to another class a couple of days later and look at the quality of teaching and learning in that classroom.

1. Biology class, language of instruction English

When we came into the classroom five minutes too late since we had been changing classes, we were surprised to find about two thirds of the students standing by their desks. Mwajabu saw our surprise and said: "I told them to stand up because some of them are sleeping". This is a strategy Mwajabu never uses when she teaches in Kiswahili. She went through the classes of phylum chordate. When she asked for examples, at first no one raised a hand. At long last, a student, who was standing, attempted an answer. Mwajabu asked the class:

Teacher (T): Is she right?

Students (Ss): Silence

T: Is she right, class?

Ss: No.

T: No, she is not right. Keep on standing.

The students tried to look into their note-books without the teacher seeing it (they were not supposed to do this) to give an answer they had just read. If it was correct, they might sit down. If not, they had to remain standing. They were at one point asked to give examples from the group "fish".

The teacher said:

T: Speak loudly. (It sounded like "lovely")

One of the boys, who had been standing for a long time, tried to read in his book and when the teacher pointed at him. He said:

Student (S): Bird. (He pronounced it "beerd")

T: Spell

 $\textbf{S} : \mathsf{B} - \mathsf{I} - \mathsf{R} - \mathsf{D}$

The teacher then wrote "bird" on the blackboard and pronounced it "bird". She asked:

 $\mathbf{T}:$ Is bird a fish? Keep standing. Don't use the material which you have given

(Instead of "have been given").

Such humiliating experiences do not happen when the teaching is in Kiswahili.

T: Have you understood what I asked you to do? Yes or no? Who has not understood?

Ss: Silence

T: You have to talk. Speak English please.

Mwajabu asked the students to go into their normal five groups. One of the five groups did not know whether they were group no. three or group no. five.

They asked the teacher in Kiswahili:

Ss: Hatujui sisi ni kundi cha tatu au kundi cha tano (We do not know whether we are group three or five.).

Before Mwajabu tried to clear this question up with them she said:

T: Speak English, please.

She was not able to get through the lesson plan she had made for the lesson.

The students in the class taught in English were silent, grave and looked afraid. They were trying to guess the answers the teacher wanted. The student who came up with the answer bird when the teacher asked for an example of a fish either did not understand the word fish, the word bird or either of them. He was trying to look in his book for an answer, which would have made it possible for him to sit down instead of having to stand as a form of further punishment. We may ask ourselves what the students learn in this lesson, which qualifications they get. They learn to obey, learn to keep quiet. They learn that if they do not answer the way the teacher wants, they get punished. They learn to memorise. They learn survival strategies like looking in their book for an answer even when this is not permitted. Some sink into apathy and become indifferent. Some learn that they are dumb, that they are unlikely to succeed. We shall now turn to another classroom where Mwajabu teaches the same subject and look at the learning taking place here.

2. Biology class, language of instruction Kiswahili

Baiolojia

Mwajabu was now teaching in Kiswahili and wanted to know about the importance of the "Failam kodata". She wanted the students to work in groups and give her examples of "faida" (advantage or economic importance) of the animals and the "hasara" (disadvantage or danger). Mwajabu was like another teacher. She smiled, seemed confident and seemed to enjoy herself. So did the students. They worked quickly, were very lively and came up with many and good suggestions. In some cases, they even taught the teacher things she did not know or had not thought about.

One of the students said that many of the large animals brought foreign currency to Tanzania (fedha za wageni). The teacher could not understand how this was possible but the student went on at great length and explained that when tourists came to Mikumi or Serengeti (national parks) for instance to see lions, giraffes and elephants the tourists bought souvenirs, used the hotels and paid guides and drivers etc. The teacher had to accept that answer was certainly correct.

The students said that many of the animals could be used for transport. The teacher asked which ones could be used for transport of people. They answered donkey, camels and horses. One student mentioned elephants but the teacher first said that elephants were not used to transport people. The student insisted that she was right because she had been informed that in India elephants were indeed used for transport of people. Another student supported her and said that he had seen on television that in India people rode on elephants and also brought goods with them tied to the back of the elephant. One student said that in India elephants were domesticated while in Africa they were not. Again the teacher was learning from the students and the students were learning from each other. Another student mentioned "kobe" (tortoise) and told about the huge ones she had heard of. People rode on those too.

There were many smiles and much laughter during this lesson and it went quickly (for the teacher, the students and the observers). At one point, the teacher wanted to know what from the cow could be used for what. After some obvious answers one student said that the blood could also be used for drinking. Some protested. The student said: "Wachagga wana kunywa damu" (the Wachagga drink blood) and looked at the teacher knowing that she is a Mchagga. Many students laughed. The teacher asked about the advantage of a lot of animals and the class was really with her. She wanted to know which animals were the "rafiki wa binadamu" (friend of human beings) and all hands were up to give her examples. Students were competing to answer.

In this lesson, students were trained in skills like combining earlier knowledge with new knowledge. They were developing creative qualifications like independence and critical thinking. They were also learning the ability to enter into constructive cooperation with others. There was no need for the teacher here to say: "Do not look in your books".

In this lesson, the students were encouraged to activate the knowledge they possessed; build on one another's knowledge; teach each other and the teacher. This was an interactive lesson, a lesson of give and take between teacher and students and between students; not simply a lesson where the teacher pours bits of knowledge into student heads. It helped the students to build self-confidence and a belief in themselves and their learning potential.

Other studies from Africa showing the quality of learning when a familiar language is used as the language of instruction

There are many studies from Africa which show similar results when a familiar language is used as the language of instruction. An evaluation study of the Improving Educational Quality (IEQ)¹ project in Ghana using participant observation to study the implementation of the language policy in Ghanaian primary schools found that pupils participated more actively when a Ghanaian language was used as the language of instruction (Dzinyela, 2001).

Chekaraou (2004) conducted a comprehensive study of two of the bilingual pilot schools in Niger using Hausa as the language of instruction in the first few years of school. He found the pupils to be eager participants in lessons, noting "the entire class wanted to participate so much that they would stand up from their seats, move towards the teacher and wanting to be called upon to answer questions" (Chekaraou, 2004: 323).

Chekaraou's conclusion re-iterates that teaching through a language with which children are familiar fostered active teacher-student interaction, which enabled students to "develop their critical thinking skills which were transferable to all learning experiences even when first language ceased to be the language of instruction in upper grades" (Chekaraou, 2004: 341). He goes on to explain how teaching through a familiar language helps the cognitive development of the students:

"By and large, native language use contributed to children developing knowledge that they would not have obtained otherwise. For example,

1 See www.ieq.org.

the discussion of idioms related to body parts which carried metaphorical meanings and the proverbs that the teacher discussed with his students were edifying examples which helped children to develop meta-linguistic skills in their own language which contributed to enhancing their overall cognitive potential" (Chekaraou, 2004: 343).

In an overview of research on language of instruction, mostly covering francophone countries in Africa, Alidou and Maman (2003) conclude that when taught in African languages students are much more active than when taught in the national, yet foreign languages. The teaching through mother tongue is more effective and provides for quality learning for students, learning where they can combine existing knowledge with new knowledge.

The Six-Year Primary Project (SYPP) in Nigeria, sometimes called the Ife Mothertongue Education Project, is to date the most authoritative case study on the use of mother tongue in formal education. SYPP, begun in 1970, was an experiment in medium of instruction involving a comparison of the traditional threeyear Yoruba as medium of instruction plus three-year English as medium of instruction with a six-year Yoruba as medium of instruction in primary schools. The SYPP was based at the Institute of Education, University of Ife (now Obafemi Awolowo University), Ile-Ife in South Western Nigeria. According to Bamgbose (2005), the SYPP started in a rural school with two experimental classes and one control class. The main aim of the project was to use Yoruba as a medium of instruction throughout the six years of primary education in order to find out whether primary education given in the child's mother-tongue medium would be likely to be more meaningful and of greater advantage to the students who matriculated through the schooling system. Other subsidiary aims were an enrichment of the curriculum, development of materials in Yoruba and a more effective teaching of English as a subject using specialist teachers of English (Afolayan, 1976). The SYPP curriculum consisted of English, mathematics, science, social studies and Yoruba. English and Yoruba were taught as subjects from the beginning of primary education, while other subjects were taught through the medium of Yoruba in the experimental classes. The main differences between the original experimental and the control classes were in the medium of instruction in the last three years of primary school as well as in the use of a specialist teacher of English as a subject for the experimental class. Bamgbose notes:

"The advantage of the latter arrangement is that only the specialist teacher of English would provide a model of communicating in English for the class, since all other teachers would teach their subjects in Yoruba. With exposure to a good model of English, it was expected that there would be considerable improvement in the pupils' mastery of the English language" (Bamgbose, 2005: 215).

In the course of the experiment, certain modifications were made to the original design of the project. The project was extended in 1973 to more schools, including urban schools. The use of specialist teachers of English was abandoned for the new experimental classes. Bamgbose (2005) notes that certain contingencies were provided for in designing the SYPP. It was thought that the experimental group taught only in Yoruba with English as a subject would require a transitional course of intensive English for one year in order to be able to transfer the concepts they had learned in Yoruba into English. It turned out that such a course was not necessary. The students in the experimental classes competed favourably with their counterparts from other public schools and passed the common entrance examination into high schools. During the project, detailed evaluation covering various subject areas and intelligence tests were administered. The results showed consistently that the group which performed highest on tests of all subjects was the original experimental group where Yoruba was the medium of instruction throughout with an English specialist teacher; followed closely by the new experimental group that did not have an English specialist teacher. The worst group in all cases was the traditional control group that did not have Yoruba as a medium of instruction in the final three years of primary education. This experiment testifies to the difference in medium of instruction, which is shown to be significant in the results (Bamgbose, 1984b; Fafunwa et al., 1989).

Several studies related to the performance and effectiveness of this programme indicate that pupils who were educated in Yoruba for six years performed significantly better than pupils who were taught in Yoruba only for three years and then taught exclusively in English.

According to Akinnaso (1993), after six years of instruction in Yoruba (and English), the cultural, affective, cognitive and socio-psychological development of children attending the Ife Project was more advanced than for their counterparts attending the regular school where English is used as the exclusive language of instruction. Comparable studies conducted in Niger found similar results. They show that when experimental bilingual schools had political and technical supports they produced positive results and the pupils were culturally more integrated into their own communities (Alidou, 1997; Bergman *et al.*, 2002; UNESCO, 2003; Chekaraou, 2004).

In recent years, the *Écoles de la Pédagogie Convergente* in Mali have also produced convincing evidence about the positive effects of teaching in familiar languages on pupils' ability to learn. Comparative evaluations of the performance of pupils from the *Écoles de la Pédagogie Convergente* and regular schools show that the first school system is more effective (see Table 4.1). Students from the *Écoles de la Pédagogie Convergente* than their counterparts from Frenchbased schools on the achievement examination administered at the end of formal basic education, which is a seven-year programme in Mali.

Table 4.1 Comparison of pupils' performance at the end of formal basic education, (Traoré, 2001: 24)

| Year | Écoles de la Pédagogie Convergente (Bilingual) | French-based schools (Monolingual) |
|------|---|---------------------------------------|
| 1994 | 56.52% | 40.62% |
| 1995 | 37.64% | 42.34% |
| 1996 | 75.75% | 54.26% |
| 1997 | 50% | 36.89% |
| 1998 | 71.95% | 48.30% |
| 1999 | 78.75% | 49.13% |
| 2000 | 68.57% | 52.34% |

According to Traoré (2001), the use of African languages along with an active pedagogy supports and enhances students' ability to learn. Overall, this educational innovation helps improve school effectiveness.

In Burkina Faso, two types of bilingual schools have been implemented since the early 1990s, the *Écoles Bilingues* and the *Écoles Satellites*. The *Écoles Bilingues* are supported by the *Oeuvre Suisse d'Entraide Ouvrière* (OSEO), a Swiss NGO and a few academics from the University of Ouagadougou Department of Linguistics. The *Écoles Satellites* offer a different type of bilingual programme. They are supported by the Ministry of Basic Education and UNICEF. Studies related to the *Écoles Satellites* show that they are low-performing schools due to a lack of adequate technical and financial support for teachers and because they use an ineffective bilingual education model. In the preceding chapter, we presented the *Écoles Bilingues*, which are emerging as providers of effective bilingual programmes with significant positive impact on the performance of teachers and students. The Burkina Faso Ministry of Basic Education conducted a comparative study of this project and its regular schools. It found that the *Écoles Bilingues* are significantly more effective than monolingual schools, which use French for six years as the language of instruction. The statistical results from this study are presented in Table 4.2.

Table 4.2

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

| | Monolingual schools | | | | Bingual 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 1/2 of the expected target performance | 18 | 8 | 18 | 1 | 17 | 23 |
| Percent of evaluated students who achieved target performance | 40% | 20% | 42.85% | 3.44% | 68% | 76.66% |

The first cohort of *Écoles Bilingues* pupils took the end of primary school examination test in 1998. After only five 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 per cent of *Écoles Bilingues* pupils successfully passed the end of primary school examination (Ilboudo, 2003). The national average is 61.81 per cent with six to seven years of instruction in French.

Using languages familiar to both teachers and children, teachers are able to appeal easily to pupils' prior knowledge and to guide them toward self-learning, cooperative learning, hands-on activities and especially the acquisition of new knowledge (Alidou and Jung, 2000). For example, Bergmann *et al.* (2002), who studied the effect of using local languages as languages of instruction in so-called experimental schools in Niger, noted that:

"En somme, les maîtres EE [écoles experimentales] [...] font naître un climat de confiance entre eux et leurs élèves. [...] Les élèves EE qui n'ont pas de complexe dans leurs rapports avec leur maître, sont plus éveillés, se prennent plus en charge, participant plus activement aux cours et contribuent à aider les plus défaillants" (Bergmann *et al.*, 2002: 66). [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.]

African countries are still struggling to find an effective strategy that allows them to move from an inadequate educational system inherited from the colonial period to a transformative and culturally-relevant education that takes into consideration African languages, people's socio-cultural and linguistic backgrounds, as well as their educational needs.

Learning science and mathematics

The effective use of familiar languages in African classrooms facilitates the development of literacy. It also helps pupils learn more effectively other subjects such as mathematics and science (Kaphesi, 2003). In a Botswana study by Prophet and Dow (1994), a set of science concepts was taught to an experimental group in Setswana and to a control group in English. The researchers tested understanding of these concepts and found that Form I students taught in Setswana had developed a significantly better understanding of the concepts than Form I students taught in English. A similar study with the same results has been carried out in Tanzania. Secondary school students taught in English (Mwinsheikhe, 2002; 2003).

Fredua-Kwarteng and Ahia (2004) mention that the USAID funded a study to investigate the differences in academic performance between private and public elementary schools in Ghana. Private elementary schools in Ghana are solely funded by their owners for the purpose of making a profit. They are also owner-controlled. The owners of private elementary schools can be individuals or church organisations. Private elementary schools are called various names such as preparatory, international or experimental schools. The private schools use English as the medium of instruction from year one while the government schools, at the time of the study, were using local languages for the first three years. Most of the private schools are located in regional urban centres such as Accra, Kumasi, Koforidua and Cape Coast, where there are a good proportion of the elite or Western-educated class. However, recently the number of private elementary schools in Ghana has increased exponentially. Some have sprung up in small towns, which hitherto were dominated by public elementary schools. Fredua-Kwarteng and Ahia see the market economy policies of the government and deterioration in conditions in public elementary schools as responsible for this trend.

The USAID study used three main methodologies in generating data for analysis: standardised testing, interviews and observations. Standardised tests in mathematics and English language were administered to a random sample of both private and public elementary school students in Ghana. The study reports that at level three or primary three, private elementary school students had a mean score of 48 per cent in English compared with those in public elementary schools who had 34 per cent. Concerning mathematics achievement at the same level, however, the mean score for public elementary schools. In a way, the last result is quite remarkable as the public schools recruit children from the poor, lower class strata of the society. The difference in the results in favour of the public schools is likely because children in public schools were taught through using mother-tongue instruction during the first years of schooling and took the exams in the local language.

The national language policy of Ghana from 1971 until 2002 stated:

"During the first three years of basic education, P1-3, teaching and learning are to take place in the predominant Ghanaian language of the area in which the child lives. English is to be taught as a foreign language before it becomes the medium of instruction in P4. Ghanaian languages and culture are then taught as compulsory subjects up to the end of basic education. French is taught as a foreign language at the JSS level where there are French tutors" (Ministry of Education of Ghana, 2001: 24).

For several years various donor agencies supported the policy of mother-tongue education for the first three years of schooling. This included, for example: Danish-supported Shepherd Schools in the north of Ghana; the UNICEF Childscope project in the Afram Plains; GTZ work to strengthen teaching in local languages in the many teacher-training colleges in the country. Also included was the World Bank, which had been financing the mass printing and distribution of textbooks and teacher guides in two major languages covering about 70 per cent of the Ghanaian population (Komarek, 2004). In mid-November of 2001, however, the "Education Sector Policies and Strategic Plans" document that called for mother tongue language of instruction in the early primary years was withdrawn and replaced by an English-only policy. In a parliamentary debate on 28 February 2002 the Minister of Education, Prof. Akumfi announced:

"Instruction at all levels of primary school will be in English. However, pupils in all basic school (both public and private) will be required to study a Ghanaian language as a subject from primary 1. Where there are teachers, French will be taught from J.S.S. [Junior Secondary School] 1 to J.S.S.3" (Parliament of Ghana, 2002: 1871).

This decision became publicly known on 17 May 2002 when Ghana's Minister of Education was reported in the Daily Graphic as saying that Cabinet had decided that from September 2002 English will be the only medium of instruction at all levels of education.

Hence, Ghanaian education policies are, in effect, reversing. Wilmot (2003a), from the University of Cape Coast, Ghana sees it as:

"Worthy to note the closeness of this new policy, in its wording, to the one promulgated immediately after independence. The difference is that the earlier policy gave room for teachers at the first grade to use their professional judgment and switch instruction from English to the indigenous Ghanaian language in situations where it was evident to them that, children at that level, were not following their lessons. The current policy, on the other hand, does not give any leeway to teachers" (Wilmot, 2003a: 5). Wilmot (2003b) later conducted a case study among second-graders to determine the effects of the 2002 language policy. Through clinical interviews with 30 selected children and probing each child's counting processes and problem-solving behaviour using various tasks (in their mother tongue), his analysis found that teaching in English only led to inaccurate assessment and evaluation of the students' abilities. Wilmot shows that children who were classified as low-achieving children actually had a lot of knowledge, which was incorrectly assessed because the children did not master the foreign language (English), the language of instruction. This is the case in many urban and private schools in Ghana which use English as the medium of instruction from the first year.

Using two of the 30 second-grade children who participated in the clinical interviews, as examples - Fiffi, from a family of high socio-economic class, speaking mostly English and sometimes Fante at home; and Elli from a family of middle socio-economic class speaking Ewe at home – Wilmot (2003b) found significant differences based on language ability not knowledge. Fante was the language of the area, thus it is not surprising that Fiffi was active in class, having fluent command of both English and Fante. Elli was, most of the time, either silent or not participating actively. According to their teacher's assessment, Fiffi was performing above the class average while Elli was just an average performer. Yet Wilmot's qualitative research showed that Elli got answers to the arithmetic problems correct, but was unable to explain how he arrived at them. When the language of instruction was shifted to Elli's mother tongue, Ewe, he was able to explain and showed a clear competency in abstract thinking, which had not been possible to detect when he was forced to answer in English. The analysis of the problems these children were asked to solve showed that they were equally competent in arithmetic and could solve arithmetical problems at the same level of difficulty. The only difference between the two children had to do with language competence. By changing the medium of instruction from the dominant classroom languages to the child's mother tongue, what was "invisible" to the teacher – Elli's true knowledge of mathematics – was made visible.

In the 2003, the TIMSS (Trends in International Mathematics and Science Study) mathematics test for year eight showed that out of the 45 countries that participated, Ghana finished as number 44. Ghanaian students scored 276 compared to the international average of 466. Fredua-Kwarteng and Ahia (2005a) try to explain these low results in mathematics. They start by explaining that a country whose national mathematics pedagogy is compatible with the

one undergirding the test, is more likely to do well than a country with different mathematics pedagogy. In Ghana, according to the authors:

"Mathematics teaching at the eighth grade is characterised by the transmission and the command models. Teachers merely transmit mathematical facts, principles and algorithms, and students are commanded to learn them in a passive and fearful manner. Students are not encouraged to pose questions or engage in problem-solving activities in order to attain both conceptual and procedural understanding of what they are being taught. Students simply memorize the algorithms and regurgitate them during tests or examinations" (Fredua-Kwarteng and Ahia, 2005a).

They find the main reason why the students do not learn problem-solving and problem-posing skills is the use of a foreign medium as the language of instruction:

"Since Ghanaian students took the test in English (the so-called official language of Ghana), those whose first language is non-English are at great disadvantage. We are not surprised that countries that topperformed in the mathematics test – Taiwan, Malaysia, Latvia, Russia – used their own language to teach and learn mathematics" (Fredua-Kwarteng and Ahia, 2005a).

The two authors, who are both mathematics educators, argue that a Ghanaian student who is proficient in his or her mother tongue or native language would be likely to answer most of the questions correctly if the questions were translated into the native language of the student. They are aware of the fact that the language of instruction in Ghanaian schools is a contentious issue. Moreover, they go on to note:

"Some Ghanaians theorize that a person becomes increasingly proficient in a foreign language after using it over and over for a long time. Applying this line of reasoning to the case under discussion, as our grade eight students go through the grade-ladder they would eventually attain English proficiency needed for mathematical problem-solving. Nevertheless, the unfortunate thing is that most of these students would psychologically drop out of mathematics before they attain English proficiency! Some Ghanaians also argue that using English for instruction makes it possible for Ghanaians to "transport" their education to any of the English-speaking countries. But as we have argued in one of our articles on mathematics education, when Ghanaian students at the secondary level enroll in schools in Canada they are confronted with two main tasks. They have to find the meaning of mathematical concepts and also the words to communicate the meaning of those concepts. Asian students, on the other hand, have to find the words to express their understanding of mathematical concepts. This is because they have already learnt the meanings of mathematics concepts in their own language. So whose education is more portable?" (Fredua-Kwarteng and Ahia, 2005a).

The authors further criticise the tests for being rooted in a western, especially American, environment using concepts which are unfamiliar in Ghana, citing the example of a "parking lot". Students are more likely to solve mathematical problems if they can relate to the cultural context of the problem.² The cultural context will be dealt with later in the chapter.

Interestingly, in October 2004, there was again a reversal of the language policy in Ghana and the new White Paper on the Report of the Education Reform Review Committee indicates that:

"The Government accepts the recommendation that the children's first home language and Ghana's official language, English, should be used as the medium of instruction at the kindergarten and the primary level. Government therefore further accepts the recommendation of the committee that where teachers and learning materials are available and linguistic composition of the class is fairly uniform, the children's first language must be used as the dominant medium of instruction in kindergarten and lower primary school" (Ministry of Education of Ghana, 2004: 10).

2 It is obvious that the authors (Fredua-Kwarteng and Ahia), in their critique of the TIMSS results, fault both the mathematical pedagogy and the language of instruction in Ghana for the poor performance and then elide the former in their analysis based on language. Nevertheless, the reason for including these examples is because they effectively highlight two of the major educational concerns throughout Africa: pedagogy (methods and training) and language.

Integrating education into African community life

The principle "from the familiar to the unfamiliar" pertains not only to language but also to the content of the curriculum. There is a need to create a culturally-sensitive curriculum taught in a language that the learners master. The following four models exist in Africa:

| | Local/familiar language | Official/foreign language |
|------------------------------|-------------------------|---------------------------|
| Culturally-sensitive content | А | С |
| Unfamiliar content | В | D |

Of these four models, model A, as shown through the evidence presented in this report, is the best model for learning and teaching, though unfortunately, the one used the least. Model D is the worst model yet, unfortunately, employed the most throughout African education systems.

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).

In his doctoral dissertation on the bilingual schools in Niger Chekaraou (2004) mentions that the aim is not only to teach in the children's mother tongue, Hausa, but also to create a culture sensitive curriculum:

"Lessons in the bilingual schools were based on themes that reflected the immediate environment of the children. Discussing endogenous topics in the classroom contributed to maintenance of endogenous cultures. The discussion contributed to children seeing their culture as positive and increased the chances that they would pass the knowledge on to future generations. For example discussing games that children did at home as well as those played in town helped the children realize the importance of these games in the society. Likewise, the notion of goats and sheep used in math lessons to teach computation not only contributed to the children valuing their background knowledge but also to its maintenance" (Chekaraou, 2004: 342).

Most studies show that the use of familiar or national languages as language of instruction has also facilitated the integration of African cultures into school curricula making bilingual or multilingual education more responsive to the needs of African children and adults. Children who attend schools that use their mother tongues or a familiar language develop pride in their cultures and languages. 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 sociocultural and economic development. These bilingual programmes integrate indigenous knowledge into modern curricula. In each country, educators have made a considerable effort to develop a multicultural curriculum, which includes not only knowledge about national cultures and how they relate to each other, but also regional cultures. Another significant goal of these programmes is to promote respect for local, national and regional diversity, and a culture of peace and tolerance among young people. In all these countries, the bilingual education curriculum also emphasizes the importance of gender equity (Ilboudo, 2003). In Burkina Faso, the *Écoles Bilingues* have several goals (Ouédraogo, 2002). Four of these goals are specifically related to the promotion of culturally-relevant education in schools and communities.

- Gender equality: in relation to access to school and course content, and putting into practice the trades learned in school.
- Links between education and production: pupils should carry out manual activities such as farming, cattle-rearing, handicraft and carpentry, related to the local economy. These activities are part of the courses taught and constitute practical fields for the lessons learned.
- Revaluing of culture: introduction into schools of positive African cultural values such as solidarity, honesty, tolerance, hard work, respect for the elderly, respect for life, as well as fairy tales and proverbs, songs and dances, indigenous music and traditional musical instruments.
- Participation of parents: fathers and mothers take part in the drawing-up of the school syllabus and in the definition of certain aspects of education in school such as production and culture.

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. In Nigeria, pupils who attended the Ife bilingual project had more advanced knowledge about their socio-cultural context and were more active than pupils in regular schools that taught mainly in English (Fafunwa *et al.,* 1989; Dutcher and Tucker, 1995; Bamgbose, 2005).

Ilboudo (2003) highlighted a significant achievement that may account for the effectiveness of the so-called *Écoles Bilingues in Burkina Faso*. He reported the increased cultural learning among pupils and higher socio-economic productivity of the *Écoles 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 gained financially because of school projects that combined traditional school learning with non-traditional learning about local economic activities (for example see Table 4.3). These activities helped teachers in teaching subject matters such as social studies, biology (breeding) and mathematics in meaningful contexts. By buying, raising and selling goats, sheep and chickens children learn about breeding in their own culture and in modern context. They learn new methods of modernising 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.

| Bilingual Schools | Number of Sheep | Price Paid for Sheep | Selling Price of Sheep | Profit |
|----------------------|--------------------|-------------------------|---------------------------|---------|
| Nomgana | 30 | 225 000 | 356 000 | 132 000 |
| Goué | 25 | 187 000 | 289 000 | 102 000 |
| Total | 55 | 412 000 | 645 000 | 233 000 |

Table 4.3 The productivity of the Economic Breeding Project, in CFA Franc

One of the main goals of this educational innovation is to prepare pupils to become productive and active citizens in their own communities. Cultural, pastoralist and agricultural activities are part of the school curriculum. By including cultural and socio-economic achievements in their official reports, promoters of *Écoles Bilingues* clearly re-emphasise the need to move from traditional evaluation of school effectiveness, which mainly looks at achievement test results, to assessment methods that are more holistic. Such types of assessment include other significant aspects such as the pupils' ability to demonstrate mastery of knowledge acquired in schools by application. This aspect must be considered and retained if critical and transformative educational reform is to take place in Africa.

An interesting educational programme that followed a similar culturally sensitive curriculum was the *Écoles Bilingues* of Burkina Faso, known as the Village School Programme, which began in 1994 in the Nyae Nyae area in the north-eastern part of Otjozondjupa region in Namibia for the Ju/'hoansi San children (Brock-Utne, 1997a; Brock-Utne, 2000). The general aim of the Village School project was to provide basic education in mother tongue for years one to three. The philosophy of the Village School Programme is that school facilities should be close to where the children live. The school should not divide children from parents. School buildings were constructed for four of the five village schools. In the fifth school, the teacher taught under a tree (Pfaffe, 2002). The older people are integrated in these village schools, too. Religion is not taught in schools since the learners receive their own religion instruction from home. The teachers are from the community and speak the language of the children.

The educational programme is geared to the culture of the learner. The language of instruction is the local language Ju/'Hoan. The Ju/'hoansi San children are known not to attend school, but they attend the Village School Programme of the Nyae Nyae Foundation. The reason for this may be the cultural sensitivity of the programme. Part of the reason why the Ju/'hoansi San have not wanted their children to attend school is that schools have practised corporal punishment (such punishment has now been outlawed in Namibian schools). Corporal punishment is a practice which goes completely against the Ju/'hoansi San culture. In the Village School Program, such punishment has never been practised. When the learners get fidgety or bored, the lessons are simply stopped. They then do something else or stop completely for the day (Brock-Utne, 1995; Brock-Utne, 2000).

The 220 children in the Village School Programme are far ahead of other learners because they learn in their mother tongue and are exposed to culturallysensitive teaching material and teachers whom everyone respects (Brock-Utne, 1995; Brock-Utne, 2000). The production of teaching material was done within the programme and great emphasis has been placed on local curriculum development. Pfaffe (2002) states that during the course of the project, literacy primers of the Ju/'hoan language were developed, based on traditional stories of the Ju/'hoan people. These were collected in the villages of Nyae Nyae by the student teachers themselves. During the subsequent development process of the readers, the original stories were accompanied by illustrations and didactically adapted for initial literacy teaching.

"Following the production of the Ju/'hoan literacy primers, their subsequent translation into English promoted the cultural richness of the Ju/'hoan people, and made it accessible to a wider audience. Moreover, the English readers are now offering possibilities for contextually appropriate teaching of English as a foreign language" (Pfaffe, 2002: 161)

The 220 children in the schools get food through the World Feeding Programme and are supplied with donkeys and carts as means of transportation^{.3}

The content of exams, assessment and the testing business

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 really the ones who decide the curriculum. 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. This behaviour and these skills then become the curriculum; they become what the children learn. Ideally, 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. The first president of Tanzania, Julius Nyerere, the *mwalimu*, expressed this professional understanding well in his policy directive published in March 1967 called Education for Self-Reliance:

³ On a trip to the Kalahari Desert in Botswana in the beginning of September 1997 Brock-Utne (1997b) met again a group of children of the San people, the Basarwa, and thought how much better it would have been for them to have had the teaching the Nyae Nyae Foundation of Namibia provided. The Basarwa children were living in hostels near a school far away from their parents and were taught through languages they did not understand. The food they received was of very low quality nutritionally.

"The examinations our children at present sit are themselves geared to an international standard and practice which has developed regardless of our particular problems and needs. What we need to do now is to think first about the education we want to provide, and when thinking is completed, think about whether some form of examination is an appropriate way of closing an education phase. Then such an examination should be designed to fit the education which has been provided" (Nyerere, 1968: 63).

In the same policy directive, Nyerere (1968: 63) notes that for the education which independent Tanzania wants to build, "the purpose is not to provide an inferior education to that given at present. The purpose is to provide a different education". He wanted the educational system of Tanzania to emphasise co-operative endeavour, not individual advancement, and to stress concepts of equality and responsibility.

Nyerere was pointing to a fact which many educators know; namely that exams, all too often, decide the curricula. What is measured in the tests and what counts for further advancement in the system, is what the pupils will try to learn no matter what the teacher tries to teach them. Imported textbooks could be used creatively by a teacher to emphasise an indigenous curriculum, were the examinations locally made. Imported examinations will make any indigenous curricular work impossible.

Takala (1995) conducted a study on the textbook provision in Zambia, Mozambique and Namibia, finding that, especially at the secondary level, importation of textbooks from abroad is significant in these countries. About their influence, he remarks:

"In policy discussions, the external influence ensuing from the use of foreign books has sometimes been criticised, but it is largely a consequence of giving preference to metropolitan secondary level examinations, or adopted versions of them, over locally designed examinations" (Takala, 1995: 164).

It is one of the great achievements of curricular work in the anglophone countries of western Africa in the years following independence that terminal school examinations were based on the school curricula worked out locally by the curriculum centres in Africa (Brock-Utne, 2000). Despite this, the renewed donor stress on "academic standards,"⁴ according to Little (1992), may well mean Western standards and Western tests.⁵

The Donors to African Education in 1989 (now ADEA) created a Working Group on School Examinations (WGSE) led by an Irish development agency, Higher Education For Development Cooperation (HEDCO), to "help coordinate and collaborate on the development of national examination systems as a mechanism for improving primary and secondary education in Sub-Saharan Africa" (Lynch, 1994: 10). The WGSE built a programme of country-specific, five-year action plans, replete with budgets, for the improvement of examination systems in 14 sub-Saharan countries. Its intention was to "draw attention to the role examinations can play in improving primary and secondary education" (Lynch, 1994: 10). The WGSE met its objectives but Lynch (1994: 10) concluded: "there still is, and will continue to be, a need for assistance to the African examination systems through advice, technical assistance and training" (Lynch, 1994: 10). Some 15 years later, this need still exists.

The technical assistance sought will most likely come from the North, from one of the "donor" countries, even though, as Pai Obanya (1999a) claims, there exists a corps of capable curriculum and testing workers in Africa. Agents from donor countries will only be able truly to assist an African country in creating relevant and effective assessment methods and examinations if they meet most, of if not all of various criteria, including:

4 When the World Bank (1988) argues that academic standards in African countries are low, it does so by referring to low scores earned by African pupils and students on tests developed in the West, for instance, by the IEA (International Association for the Evaluation of Educational Achievement). These tests stem from a Western culture and entail Western concepts. Most African students who are required to take them often have to do so in their second, or even in their third, language, while most students in the industrialised countries answer them in their mother tongue. IEA tests in reading comprehension, general science, and mathematics, administered to some African countries and referred to by the World Bank in its 1988 EPSSA paper, led the World Bank to draw the conclusion that "the quality of education in Sub-Saharan Africa is well below world standards" (World Bank, 1988: 40). African educational researchers are extremely sceptical of assessing African students against batteries of tests that have been used transnationally by bodies such as the IEA, which they see as coming "out of very specific cultural milieus in northern industrialised countries" (Ishumi, 1985: 13).

5 The Danish researcher Joan Conrad has studied the effects of a basic education programme which was put in place in Nepal as a consequence of the donor commitment to basic education following the Jomtien conference. She admits that donor agencies from the North may have the best intentions when they embark on a project like the Basic and Primary Education programme (BPEP) which was initiated in Nepal in 1992. They feel committed "to improve the quality of teaching and to meet basic educational needs in Nepal" (Conrad, 1994: 1). But the expression "the quality of teaching" is loaded with ideological content. Main components of the project include curriculum development and textbook production as well as improvement of the general examination system. Specific efforts will be directed toward developing an effective grade five examination based on predetermined criteria. The BPEP represents a model programme generally regarded as being universally valid in relation to improving educational quality in developing countries with no regard to the characteristic cultural conditions of any specific country. Conrad, who is highly critical of the functioning of the BPEP in Nepal, laments: "The very similarity of such programmes is alarming" (Conrad, 1994: 20).

- familiarity with the culture of the country;
- ability to speak one or more (preferably) of the African languages spoken in the region;
- knowledge of the educational ideology of the state in question;
- familiarity with the curriculum they have been (or are in the process of) creating; and
- awareness of the hopes of parents and children for the future.⁶

Little (1992) analysed the tensions between external standards and internal cultures. Cultural definitions of necessary levels of learning achievement vary; so, too, do strategies for assessing them. She detected an increasing trend toward the internationalisation of educational assessment targets and practices and asked:

"If "international standards" which in many instances [in the African context] means "external standards" produced in the West begin to take precedence over national and sub-national standards what are the implications for nationally and culturally prescribed curricula? Will an internationalised education assessment technology begin to drive an internationalised curriculum reform? How much wider will become the gap between the culture of those who control education and who design "international" tests and curricula (i.e., the "supranational educators") and the culture of the child whose learning is the goal?" (Little, 1992: 20).

The fact that exams still have such a great influence on the curriculum also provides an opportunity for conscious educationists working in ministries of education and national examination councils to monitor and analyse exams and use the analysis for the construction of different exams that will pay more attention to an indigenous curriculum. In this way, an indigenisation of the curriculum can take place.

6 As the Danish educational researcher Spæt Henriksen also realises when describing a curriculum project in which the Danes are involved, in Lithuania, "It should not be possible to embark on a project which defines itself as 'help to self-helping' without trying to understand as much as possible of the culture of the country, its history, and the structure and content of its education" (Henriksen, 1993: 71, my translation).

Monitoring exams: a positive example

Shortly after its independence from South Africa, Namibia monitored the countrywide examinations for cultural and gender bias (MEC/NIED, 1994). The country's monitoring of exams as an evaluation method was quite impressive; it is an example to other African countries.

The monitoring of the junior secondary certificate examination in 1993 showed, for instance, that the examination in the home science subject had a clear cultural bias toward urban living and European food. All the illustrations were of Europeans or European home environments; all the recipes were of European food. There was nothing in the examination paper indicating that it was from Africa or Namibia. When it came to the examination paper in art, it was found that only 16 per cent of the marks could be earned on anything to do with Namibia; 84 per cent of the marks were devoted to European art history. The monitoring paper concluded:

"With only a token [attention] to Namibian or African art, this examination continues the cultural disinheritance of Namibia, strongly criticised in Ministry documents, and counter to Ministry policy. The examination paper as a whole is also devoid of gender awareness" (MEC/NIED, 1994: 9).

Likewise, the examination paper in music was found to contain cultural biases. Of 100 marks, 74 could be gained on specifically European music, 10 on specifically African music and 16 on more or less culturally-neutral music theory. Only male composers were referred to in the exam, however. The history examination was praised, however, for promoting awareness of Namibian and African history (MEC/NIED, 1994).⁷

7 However, the history examination paper was criticised for making women and their contribution to history invisible. When it came to the examination paper in accounting, it drew on a variety of cultural settings but nearly all persons mentioned were male.

When students are assessed through a language they do not master

As mentioned earlier in the chapter, the teaching in African classrooms is conducted in a code-switching manner. Teachers switch between the official language of instruction and the local language that children speak. Despite the value, and often necessity, of using this strategy, it presents a problem at examination time, as exams are not in the mother tongue. If students answer in their mother tongue or local language, they receive zero points, even if their answers are correct. Makelela (2005) writes about this problem in South African schools. Teachers make use of the African languages of the pupils in teaching, but exam answers must be in English or Afrikaans; answers in other languages are not accepted.

Kalole (2004) found that 18 of the 23 markers of exam papers interviewed and eight of the 10 officers interviewed from the National Examinations Council of Tanzania were in favour of a switch from English to Kiswahili as the language of instruction in secondary school. These are the people who, more than anyone in Tanzania, experience the difficulties that students encounter because of the foreign medium of instruction. All interviewees admitted that language incompetence in English seems to be the main factor influencing candidates' performance in final examinations.

Conclusion

The review of available studies discussed in this chapter should provide sufficient evidence to stop the impossible debate about the effectiveness of the use of African languages as language of instruction. The studies show that active learning is taking place in programmes where instruction is in African languages, the languages known to teachers and children. The use of familiar languages alone does not, however, 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 should be graded and judged for correct answers regardless of the language in which the answer is given (i.e. local language, mother tongue or the official medium of instruction). For real learning to take place in African schools, policy-makers and educators must transform the current educational system. There must be a move away from the banking and bookish model of education, which is a result of teaching through a language unfamiliar to both teachers and students, to a more active, empowering and transformative educational model based on African realities and educational needs and conducted in African languages.

Recommendations

- a. More pilot studies using a familiar African language as language of instruction beyond the third year in primary school should be undertaken. The easiest would be to start such studies in countries where a familiar African language is already being used as language of instruction in the first three years of schooling.
- b. Pilot studies using a familiar African language as language of instruction in secondary school should be undertaken. The easiest would be to start such studies in countries where a familiar African language is already being used as language of instruction throughout primary school, for example Tanzania and Ethiopia.
- c. Culturally -sensitive curricula in African languages that reflect the culture, surroundings and heritage of the child should be developed.
- d. Exams should be monitored for their cultural content. Children should be allowed to answer exam questions in the language in which they feel most comfortable.

Chapter 5

Use of African languages for literacy: conditions, factors and processes in Benin, Burkina Faso, Cameroon, Mali, Tanzania and Zambia

Hassana Alidou¹

This chapter presents a critical review of available studies related to language use and literacy in Africa. In order to assess the situation and determine the conditions, factors and processes that affect the development of literacy in sub-Saharan Africa, the studies reviewed are from both anglophone (Cameroon, Tanzania and Zambia) and francophone countries (Benin, Burkina Faso, Cameroon, Mali and to a certain extent Niger). It is by no means an exhaustive analysis of the situation, as access was available to only a few studies per country. There remains, therefore, a need to conduct country-by-country research in order to assess clearly the situation of the use of African languages. Nevertheless, this chapter offers an initial step towards greater understanding of the factors and conditions that facilitate or undermine the promotion of African languages and literacy.

Literacy and basic education are considered the most significant factors that positively impact on a country's socio-economic and political development. For this reason, national and international organisations have developed policies and programmes that seek to promote literacy and basic education among children and adults. Since the early 1960s, many African governments have joined the international community to express their political commitment

1 The original draft of this chapter was prepared by ADEA for its Biennial Meeting (Libreville, Gabon, 27-31 March 2006) and published on the ADEA website at www.adeanet.org.

to the promotion of literacy and mass education. This commitment has been translated concretely through many countries' national budgets, some of which allocate at least one third of the budget to education. The language and/or medium of instruction is one of the foci of national education budgets.

Countries such as Burkina Faso, Cameroon, Mali, Niger and Zambia have adopted national educational laws that recognise national languages as a means of instruction in both formal and non-formal education, and their ministries of education have developed new language-in-education policies accordingly. It is important to state that all these countries are in the process of either elaborating their new vision and policy for literacy and non-formal education or have just started implementing the new policy. Most governments are struggling to develop an effective educational policy that links formal and nonformal education. These two sub-sectors are viewed as separate entities even though recent studies show that there is a possibility for cross-fertilisation between them.

Despite new policy and programme direction, there is a need to reaffirm strongly governments' commitment to the promotion of African languages for literacy and education. There exists a huge gap between the policy stated in the governmental policy documents and the implementation of language and education policies. In order to attain literacy rates of 50 per cent or above in most countries, African policy-makers must have not only the political will, but also allocate funding for the promotion of literacy and basic education.

The review of studies relating to literacy in the six countries considered for this chapter indicated that Tanzania is the only clear success story with regard to the promotion of a national language, Kiswahili, and literacy among children and adults. It is also the only country which has demonstrated that it is possible to develop a literate culture and environment in an African language. This is in no small way due to the strong political will, commitment and vision of former President Julius Nyerere, which he used to implement an authentic educational system and language policy.

Contextualising the chapter: Benin, Burkina Faso, Cameroon, Mali, Tanzania and Zambia

This chapter focuses on the use of African languages and literacy in Africa using studies on six countries, namely Benin, Burkina Faso, Cameroon, Mali, Tanzania and Zambia. These countries are divided into three groups based on their colonial and post-independence language policies. In the francophone countries (Benin, Burkina Faso and Mali), French is the exclusive official language of administration and education. Cameroon is an officially bilingual country that uses French and English as its official languages. Tanzania is also an officially bilingual country where both Kiswahili and English are used as official languages in administration and education. Zambia is classified as an anglophone country with English as its official language. This classification should not undermine the fact that all the six countries are multilingual and multicultural. Local languages are used as the main means of communication by the populations.

In this overview of the conditions, factors and processes that affect the use of African languages and literacy in these countries, the main questions addressed are:

- What types of policies are implemented (conditions, factors and processes)?
- How are literacy programmes funded?
- What type of problems emanate from the implementation of these policies?
- How can policy-makers facilitate the development of a literate culture in Africa?

Post-independence language and literacy policies

International as well as national legal frameworks or political decisions have influenced the use of national languages for education in African countries since the early 1960s. These legal and political frameworks are presented below. The discussion however, is not exhaustive and needs to be further substantiated, particularly given the lack of documentation and research.

International frameworks

In his extensive critical literature review on language policies in Africa, Wolff (see Chapter 1) notes that the majority of African countries have not drastically changed the language policies they inherited from the colonial era. Consequently, languages such as French, English, Portuguese and Spanish continue to remain dominant and are afforded the status of official languages of administration and education to the detriment of national languages, which are relegated to non-formal status. Africanists' argue that the retention of such policies does not promote mass education, literacy and national integration. Instead, this has had a negative impact on the development of education in general and literacy in both official languages and national languages.

Afrik (1995) stated that since 1960, three major international conferences on adult education, held in Montreal in 1960, in Tokyo in 1972 and in Paris in 1985, addressed specifically the issues of literacy, peace and international cooperation, democracy and the creation of learning opportunities for all age-groups and all people (i.e. including women). More recently, several declarations stemming from international institutions or symposia have specifically advocated the promotion of literacy, women's education and the linking of formal and nonformal education in the broad context of lifelong learning (the United Nations declaration of 1990 as "International Literacy Year" and the period 1990-2000 the "International Literacy Decade"; the "Education for All" conference, held in Jomtien in 1990; and the World Conference on Women, held in Beijing in 1995).

At the continental level, several high-level governmental meetings, declarations and plans of action emphasised the need to promote national African languages in education and other socio-economic domains. The major political declarations and plans of action include:

- the Organization of African Unity (OAU) Cultural Charter for Africa (1976);
- the OAU Lagos Plan of Action (1980);
- the OAU Declaration on the Cultural Aspects of the Lagos Plan of Action (1985);
- the OAU Language Plan of Action for Africa (1986);
- the draft charter for the promotion of African languages in education, developed during the Pan-African Seminar on "The Problems and Prospects of the Use of African National Languages in Education", organised by the Association for the Development of Education in Africa (ADEA) in 1996 in Accra, Ghana; and
- the Harare Declaration which arose from Intergovernmental Conference of Ministers on Language Policy in Africa (1997) organised by ADEA. In Harare, ministers, experts and representatives of intergovernmental agencies worked together to develop a detailed plan of action to be taken at regional, sub-regional and national levels. It states the nature of each action as well as its objectives, targeted results, timeframe and implementing bodies.

As a result of these international and regional conferences, declarations and political frameworks, ministries of education and ministries of social development have included in their various policies plans of action that comprise a component on adult education and strategies to eradicate illiteracy among children and adult populations. The Conference organised by ADEA in Cape Town (2000) re-emphasised the need to move from political declarations to more concrete actions that will promote the use of African languages in formal and non-formal education.

According to Hazoumê (2005), states have played more of a political role through the adoption of laws, which are aligned with the international policy frameworks discussed above. Tanzania is the only country in Africa which has effectively promoted a language policy that uses a national language as an official language in administration and education, along with English. In almost all other African countries, the use of national languages in formal domains is relegated to either the first three years of primary education (Zambia) or long-term experimental bilingual programmes (Niger, Mali, Burkina Faso and Cameroon). The use of national languages is, however, promoted for literacy and adult education and other non-formal educational activities.

National legal frameworks and recent developments

Benin

In 1985, the Regional Office for Education in Africa conducted a survey on "African Community Languages and their Use in Literacy and Education" (UNESCO/BREDA, 1985). The report indicated that Benin and Togo were the only two African countries with national policies for the use of African languages in pre-school education (UNESCO/BREDA, 1985: 54). Akplogan (2005) notes that the government of Benin has affirmed its commitment to promote national languages by introducing the teaching of these languages in the teacher-training programme curriculum, and creating the National Directorate for Literacy and Rural Media. It also enacted the 1977 law, which specifically stipulates in Article 3 that all citizens have the right to use national languages for free expression. Benin also created, in 1980, a Ministry for Alphabetization and Popular Culture. Further, in 2003, Benin adopted a National Literacy and Adult Education Policy. The main goal of this policy is to allow all citizens to use national languages for the development of their cultures and active participation in the democratic process. A ten-year plan (2006-2015) was developed in order to implement the new policy.

Burkina Faso

Since independence, Burkina Faso has adopted six laws whose main purpose is to promote the use of national languages for literacy and education. In 1969, the government enacted the first post-independence law that led to the creation of the national commission of Voltaic languages (Napon, 2001). The purpose of this commission was to conduct corpus-planning work and to promote national languages. The commission is composed of 15 sub-commissions. In 1970, Haute-Volta and UNESCO launched the first literacy campaign and in 1974, the government created the Department for the Promotion of Literacy (ONEPAFS). In 1978, local languages were given the status of national languages. Therefore, all languages spoken by the different ethnic groups in Burkina Faso became national languages. It was also in 1978 that the government implemented its first experimental school. In 1997, the government elevated national languages to the status of languages of instruction for both formal and non-formal domains.

The use of Burkina languages was highly promoted during the Revolution led by President Thomas Sankara. A mass literacy campaign similar to the Cuban style "commando" literacy programme was launched (Ilboudo, 2003). Since 1990, Burkina Faso has promoted several educational innovations in order to attain the Education for All goals. The use of national languages in both formal (*Écoles Satellites; Écoles Bilingues*) and non-formal education (*Centres d'éducation de base non-formelle; opération* ZANU, the REFLECT and text pedagogy approaches) is a central element of this reform.

Cameroon

If language promotion were strictly only a matter of legislation or constitutional reforms, then Cameroon would be among the champions of local language promotion in literacy on the African continent. The legal and constitutional reforms Cameroon has put in place in favour of the development of local languages are as numerous and varied as the languages and cultures. Yet Cameroon has made little concrete input into the process of fostering the effective use of local languages in literacy. However, certain actions have been undertaken that point to the government's awareness of the vital importance of this process. These actions are:

• the creation of ministries charged with aspects of language research, development and promotion such as the Ministry of Scientific Research (MINREST), the Ministry of Youth Affairs (MINJEUN) responsible for the promotion of literacy, the Ministry of Basic Education (MINEDEB), the Ministry of Culture (MINCULT) and the Ministry of Women's Affairs (MINCOF);

- constitutional provision for the development and promotion of national languages contained in the revised constitution of 1996 that calls for the protection and promotion of national languages (Republic of Cameroon, 1996);
- law N° 98/004 of 14 April 1998 pertaining to the general orientation for education in Cameroon that provides for, among other things, the training of citizens rooted in their cultures and the promotion of national languages (Ministry of National Education, 1998);
- decree N° 2002/004 of 4 January 2002, reorganising the Ministry of National Education that creates pedagogic inspectorates for mother tongues (Ministry of National Education, 2002);
- law N° 2004/018 of July 2004 on the Orientation of Decentralisation, transferring powers to local councils to implement programmes for the eradication of illiteracy and the management of educational infrastructures. Section III of the law provides for the promotion of national languages (Republic of Cameroon, 2004a);
- law N° 2004/019 of July 2004, empowering regions to undertake education and literacy. Among other things, the law empowers regions to support the elaboration and implementation of regional literacy programmes, the training of trainers, materials production, the realisation of a linguistic map of the region, the promotion of national languages, participation in editing national languages, the promotion of written audio-visual press in national languages and the establishment of infrastructure and equipment (Republic of Cameroon, 2004b). Finally;
- law N° 98/003 of 8 January 1998, reorganising the Ministry of Culture and thus formally creating a department for mother tongues (Republic of Cameroon, 1998).

These constitutional and legal reforms establish national languages and cultures as an integral part of national linguistic heritage. It must be noted, however, that these laudable reforms have fallen far short of producing any concrete results. Nevertheless, they have provided the frameworks for reinforced research, language development and sensitisation in favour of national languages in education and literacy in Cameroon.

Mali

Mali has addressed literacy issues during several major seminars organised by the government (Coulibaly, 2003). Such seminars include the National Seminar on

Education (1964), the General State of Education Seminar (1978) and the Debate on National Education (1991). To respond to the medium of instruction issues in formal basic education and to promote literacy and adult education among its youths and adult population, the government revised its language policy twice. According to Coulibaly (2003), decree No 96-049 of 20 August 1996 defined the modalities for the promotion of national languages. First, it recognised 13 languages as national languages. Article 2 of the decree encouraged the use of national languages in cultural, scientific and technological development. The state recognises the right of communities and citizens to initiate or participate in any actions geared toward the promotion of the 13 national languages. The educational law (number 046) signed on 28 December 1999 states in Article 10 that instruction can be offered in the official language as well as the national languages.

Tanzania

Among all the African countries, Tanzania is the only country which has been able to go beyond political declarations, un-implemented language policies and experimentation. The reasons that it stands out among African nations are historic. Beginning in 1967 when President Nyerere proposed, in the Arusha Declaration, the adoption of socialism as a political and economic system for Tanzania, Nyerere also conceptualised "Education for self-reliance". The language education policies in Tanzania continue to reflect it socialist philosophies and its socio-cultural heritage. Nyerere provided a clear vision of an authentic education. He argued that education must take into consideration rural people's socio-economic, cultural, and political aspirations and needs. As a result, the curriculum content of the schools – whatever the level and the type of education (i.e., formal or non-formal) – must take into consideration "what people must know and do in order to build a socialist nation" (cited in Mpogolo, 1985: 131). He suggested that teachers should promote democratic practices in classrooms by engaging their students in the planning and decision-making processes. He also stressed that teachers and students should develop productive activities related to agriculture, and other socio-economic and cultural activities practiced in students' environments.

Adult education was integrated in Nyerere's education vision. He believed that development goals cannot be achieved without the effective involvement of Tanzania's adult population. He argued that it takes a longer time for children to complete their education, therefore. Tanzania could not wait for the youth to complete school to develop the country. In 1964, he said:

"First we must educate adults. Our children will not have an impact on our economic development for five, ten, or even twenty years. Adults can make immediate use of education" (Nyerere cited in Mpogolo, 1985: 32).

Consequently, he made an explicit call for the promotion of adult education in the Dar es Salaam Declaration (1969, in Nyerere 1978). In this declaration, he stated that adult education must serve two main goals. It should "inspire both a desire for change, and an understanding that change is possible, and help people to make their own decisions, and to implement those decisions for themselves" (Nyerere, 1978: 30).

Contrary to the majority of his peers who believed that national unity can only be achieved by retaining colonial languages as official languages, Nyerere believed that national unity could and must be built by using national languages. Therefore, he defined a national language policy, which promoted, systematically, Kiswahili as Tanzania's official language of administration and education. English is also maintained as an official language. Consequently, Kiswahili has been used as the language of communication in all socioeconomic, cultural and political domains in Tanzania. It has also gained national, regional and international status as a language of radio broadcasting and television as well as of print media in the Democratic Republic of Congo, Kenya, Rwanda, Tanzania and Uganda.

Nyerere promoted a bilingual policy for formal education. Because of this legacy, Kiswahili is the medium of instruction at primary level and English is used in this capacity at secondary and tertiary levels. Kiswahili is taught as a subject in secondary schools, and it becomes an optional subject at the tertiary level (Roy-Campbell and Qorro, 1997; Brock-Utne and Hopson, 2005).

Zambia

In 1996, the Zambian government presented its education policy in a document entitled *Educating Our Future*. The policy includes a dual strategy for addressing literacy among children and adults. The education language policy in this document suggests that in formal education, initial literacy and numeracy would be developed through a language that is familiar to children. The use of Zambian languages as languages of instruction for basic literacy is viewed as a necessary strategy to promote both literacy and learning in students' first languages and English. The Primary Reading Programme, a seven-year programme designed in collaboration with DFID, is an example of projects in place to promote literacy. Sampa (2005) argues that the programme has been effective in achieving its main goal, namely helping children acquire adequate literacy skills and become successful in school.

Since the advent of independence, governments have invested heavily in education (Mumba, 2002). However, up to now they have not been able to meet the rising costs of the formal system and the demand for education resulting from growing populations and increasing expectations of the potency of literacy.

Zambian education policies first achieved significant attention when, in 1966, Zambia obtained the support of UNESCO to develop its first basic literacy programme. UNESCO trained literacy experts and teachers and it also produced the primers used in the literacy classes. The curriculum of the programme focused on teaching basic literacy skills (reading, writing and numeracy). The evaluation of this first programme indicated that the programme was not effective. The evaluators suggested that the curriculum did not take into consideration the socio-economic background of the participants. The teaching and learning materials were inadequate and the neo-literate quickly fell back into illiteracy.

In reaction to the results of the evaluation of the Basic Literacy Programme (BLP), the Ministry of Community Development and Social Services implemented a new literacy programme (1971 to 1990) oriented toward functional literacy. Producers of cash crops such as maize and groundnuts were particularly targeted. The Ministry of Community Development and Social Services created centres where literacy courses were offered and used radio broadcasting to disseminate pertinent curricular information. The programme, however lacked adequate teaching and learning materials, sufficient funding and human resources, such as teachers, and was thus abandoned.

After the Jomtien conference, the government invited various stakeholders to address the issue of literacy in Zambia. The Zambian Alliance for Literacy (ZAL) was formed. It launched the National Literacy Campaign that lasted from 1991 to 1994. More recently, the Ministry of Education is considering various policy directions and initiatives to promote literacy, these include:

- 1. Making funds available to the Central Statistical Office to carry out a comprehensive national literacy survey among those aged 15 and above.
- 2. Preparing a directory of NGOs involved in the promotion of literacy activities in the country.

- 3. Establishing a central coordinating body for literacy activities, comprising key stakeholders (Ministry and NGOs).
- 4. Promoting the integration of literacy instruction in government programmes related to agriculture, health and education for a better living.
- 5. Establishing nine literacy centres (one in every province) for the production of materials, training of instructors and provision of short courses aimed at sustaining literacy skills among neo-literates and promoting income-generating activities among women.
- 6. Reducing illiteracy to 25 per cent in districts with less than 50 per cent literacy rates by concentrating primarily on female literacy programmes.
- 7. Establish rural libraries alongside literacy centres to promote a reading culture.

Zambia has not adopted any new policy of alphabetisation yet. In the national report published for CONFINTEA VI (2009), Zambia affirms that the policy of adult alphabetisation was delayed and this had an impact on the design of the programme and on the accreditation of literacy and NFE. The efforts aimed at formulating a policy are placed under the supervision of the Zambian National Commission for UNESCO. It is expected that the ministry for community development and social services will create rural libraries alongside with literacy centres to promote the culture of reading. This policy is currently being followed by the Zambian government.

The impact of the post-independence language policies on the use of African languages and literacy

The international and national language policy frameworks discussed in this Chapter have influenced the use of national languages and education in several ways. The influence varies from one country to the other and from one region to the other. Historical factors, some of which were discussed above, account for some of the disparities and differences in policy and implementation (see also Chapter 1). From the institutional perspective, all African countries have created departments of literacy and adult education; usually within either the ministries of education (Benin, Burkina Faso, and Mali) and/or social and community development departments/ministries (Afrik, 1995). Some countries, such as Benin and Senegal, have even created a Ministry of Non-formal Education and Literacy. Since the late 1970s, UNESCO has supported technically and financially

the promotion of functional literacy and post-literacy campaigns in Africa. Mali, Tanzania and Zambia were among the countries who participated in the World Literacy Programme UNESCO launched in 1968.

In Benin, Burkina Faso and Mali, Departments of Literacy and Adult Education, along with the National Language Commissions and the Departments of Linguistics and National Languages, were responsible for the promotion and development of national languages. Several functional literacy campaigns have been launched since the early 1970s in the francophone countries with the help of UNESCO. Adult literacy rates almost tripled over a period of 30 years in West Africa. However, there is a significant disparity between countries in terms of the accumulated number of literate individuals. This situation is accounted for by the state of literacy and education attained by each country at the advent of its political independence. At the end of colonisation in the early 1960s, less than 5 per cent of the population of Burkina Faso, Mali and Niger had access to education. Therefore, the adult illiteracy rate for these countries was above 90 per cent. Mali made significant progress with regard to adult literacy. The number of adult literates increased by a factor of seven over a period of 30 years (six per cent in 1970 to 41 per cent in 2000). The rate of adult literacy in Benin and Burkina Faso tripled in the same period. It went up in Benin from 11 per cent in 1970 to 37 per cent in 2000 and from seven per cent to 24 per cent in Burkina Faso. It could be argued that countries such as Benin, Burkina Faso, Cameroon and Mali have made significant progress since independence. However, they have not reached a level of national literacy that can significantly affect economic development. They remain among the countries with the highest illiteracy rates and, with the exception of Cameroon, they are also classified as the least developed countries in the world. Cameroon is near the bottom rank of countries classified as "Medium Human Development" in the UNDP Human Development Index of 2008 (International Bank for Reconstruction and Development/The World Bank, 2003; UNDP, 2008).

Benin

In Benin, the Ministry of Basic Education and Literacy report (2005) indicated that several literacy campaigns were undertaken up to the mid-1980s. However, the country still faces a high illiteracy rate. At the national level, 67.4 per cent of people are illiterate, and of these 78.1 per cent are women. The ineffectiveness of the literacy programmes is characterised by the high drop-out rate (more than 11,000 participants drop out of literacy classes each year) and the loss of literacy skills among former participants. Only 1.71 per cent of women are literate in the national languages.

To promote the use of national languages and literacy among youth and adults, in 2003, Benin adopted a new national literacy and adult education policy (2003). The policy aims to allow all citizens to use national languages for the development of their cultures and for active participation in the democratic process. Further, it seeks to eliminate illiteracy among children and adults by making sure that school-aged children have access to formal basic education and that those who are 15 years and above have access to quality literacy and adult education programmes. The policy targets adolescents and young adults who did not have access to formal education. Finally, Benin has adopted the "Faire Faire Stratégie" or "Making it Happen" strategy (as in Burkina Faso as noted above) in order to facilitate collaboration among stakeholders (government services, NGOs, local communities, funding agencies) in the delivery of literacy services and the decentralisation process.

One of the major problems faced by Benin in the promotion of literacy is the lack of adequate funding to run the literacy programmes on a larger scale.

Burkina Faso

In Burkina Faso, the involvement of the civil society in the provision of literacy and non-formal education programmes is remarkable. At national level, a notable example is the contribution of the Association *Tin Tua* (i.e. "Let's Develop" Ourselves by Ourselves" in Gulmancema) in the Gurma region (eastern part of the country). The programme targets various age groups. According to Benoit Ouoba (2000)², the founder of *Tin Tua*, almost a third of the adult population in Gulmu has passed through Tin Tua literacy centres, with men and women being equally represented. The centres are called *Banma Nuara* – a Gulmancema term meaning "Wake Up". A successive bilingual teaching method is promoted in *Tin Tua* centres. This method requires that a student become literate in Gulmancema before learning French language. This is coupled with an attempt to deepen students' cultural awareness through access to a collection of traditional, local tales. The effectiveness of the *Tin Tua* approach can be seen in the high pass rates for students who sit Burkina Faso's national primary school examination. A number of the students from this system have also gone on to acquire secondary school qualifications. Tin Tua opened a vocational institute for participants considered too old to pursue a secondary education through normal channels or those who cannot afford it. In the vocational programme, students are taught advanced mathematics, mathematics and basic economics, as well as other subjects such as health, hygiene and environmental studies.

2 Discussion held with Dr. Ouoba, B. in Ouagadougou in 2000.

In order to help neo-literates remain literate, *Tin Tua* created a newspaper, Labaali (i.e. the news). This newspaper is read not only in Burkina Faso but also in Benin, Côte d'Ivoire and Togo where speakers of Gulmancema can be found. Due to its success, *Tin Tua* has obtained the financial support of several organisations including UNICEF, the Netherlands Development Organisation (SNV), OXFAM Canada and the World Bank. It has also been recognised as the Ministry of Basic Education's main partner for literacy in the Gurma region.

The Summer Institute of Linguistics (SIL) is also an important contributor in the promotion of national languages in Burkina Faso. The main goal of this organisation is to translate the Bible. In recent years, the SIL has provided literacy and basic education classes. The SIL developed the alphabet of all the national languages used for literacy in Burkina Faso. A Swiss NGO, Oeuvre Suisse d'Entraide Ouvrière (OSEO), is also actively involved in promoting non-formal education in Burkina Faso. OSEO and Elan et Développement (a local NGO run by linguists from the University of Ouagadougou) have initiated the *Ecoles Bilingues* in collaboration with the Ministry of Basic Education (see Chapters 3 and 4). Save the Children and USAID have also sponsored a few non-formal education centres in Burkina Faso as a strategy to prevent child-trafficking.

With regard to the promotion of quality materials in national languages, UNICEF, the German Foundation for International Development (InWEnt, an NGO) and the MEBA (Ministère de l'Enseignement de Base et de l'Alphabétisation), created a professional development training programme for national language textbook authors. Through this partnership, 37 authors were trained and language teaching and learning materials for the first, second and third years were produced for the *Ecoles Satellites*. InWEnt also trained a few editors in the production of materials in the national languages. *Tin Tua* and Elan et Développement participated in the training offered for publishers.

To promote the development of a literate culture in Burkinabè languages, the government created the *Grand Prix National des Arts et des Lettres* (GPNAL). Authors who produced written literature (novels, short stories, drama, poetry, collection of tales, and so on) in the national languages were awarded national literature prizes. According to Sanou (1994), poetry is the best category with 59 collections of poems, followed by tales with 24 collections, drama with 20 texts, short stories with three collections, and one in the novel category. This enticing policy contributed to the promotion of literate environments in national languages.

A seminar on the theme of methods to promote newspapers in national languages was held in October 1994 after a study published by Professor Norbert Nikièma from the University of Ouagadougou showed that out of the 60 newspapers in national languages only about 15 continue to be published. Despite this apparent downward trend in the early 1990s, a 1998 study showed that 19 papers representing eight national languages were published under the auspices of the Association of Editors and Publishers in National Languages (AEPJLN). The following types of papers were produced: three bimonthlies (two in Mooré and one in Nuni); four monthlies (three in Mooré and one in Glance), and 12 quarterlies (six in Mooré, two in Jula, and one each in Nuni, Pulaar, Lyélé and Sissala).

To improve its literacy programme, Burkina Faso has adopted the "Faire Faire" Strategy, the main goals of which are to involve all stakeholders (governments, private companies/institutions NGOs and communities) in the design of policies and the development and implementation of demand-driven programmes. The strategy also seeks to facilitate the decentralisation of literacy services and to promote educational capacity building at local and regional levels. Several problems have arisen in the initial stage of implementation of the strategy. Generally, no official document specifies the criteria for creating literacy programmes. The government has, however, created a fund called *Fonds pour l'Alphabétisation et l'Education Non Formelle* (FONAENF) for the development of literacy and non-formal education. It has also stated the conditions for financing literacy programmes. To access this fund the association/NGO must fulfil four conditions:

- the operator must have at least three years' experience in operating literacy programmes;
- the operator must demonstrate a high success rate;
- the literacy operator must have the necessary infrastructure, equipment and didactic materials; and
- the operator must have the necessary human resources (animators, supervisors and coordinators) in literacy work.

Several problems have emerged in the application of these criteria: it has become evident that few local associations can fulfil these requirements. Most of them do not have the required experience for delivering literacy programmes. The government's criteria automatically exclude young operators from competing even if the language in question has no operator on the ground. These selection criteria must be reviewed to allow all literacy operators and all languages to be taken into consideration by the new strategy. Otherwise, only languages such as Mooré and Gulmancema will be promoted.

Cameroon

In Cameroon, the role of the government has been both a legislative and a facilitating one. Constitutional and legal reforms have established national languages and cultures as an integral part of national linguistic heritage. The government has also actively sought the contributions of international bodies within the process of enhancing the use of local languages in learning. Such is the case with SIL, the Bible Society and UNESCO. With technical assistance from these bodies, the government, in 1980, set up the Institute for Social Sciences within the Ministry of Scientific and Technical Research. The Institute's Centre for Anthropological Research was tasked, among other duties, with the promotion of research on the development and use of national languages in education. It is in this framework that the Operational Research Project, now Programme for Language Education in Cameroon (PROPELCA), a product of the then University of Yaoundé, was launched as a pilot project in 1981. Established to facilitate the introduction of national languages into the educational system alongside the official languages, PROPELCA paved the way for local language research and literacy in the country. Today, at least at the level of research, it has clearly been established that national languages constitute the cornerstone of learning and development in the country. The different constitutional and legal reforms cited above are testimony to the degree of consciousness that prevails in the country with regard to the role of local languages in development. Though crucial in setting the pace for social change, consciousness alone is not sufficient for the promotion of languages in learning and development. It needs to be accompanied by real commitment to make things happen. It is here that Cameroon has failed the most.

A major stride in state involvement in the process of promoting local languages in literacy was the launch, in October 2005, of the National Literacy Programme (NLP). This programme, funded by the Highly Indebted Poor Country Initiative (HIPCI), recognises the role of private institutions in promoting literacy in Cameroon. Institutions such as National Association of Cameroonian Language Committees (NACALCO) and SIL have been recognised as potential field partners. The NLP also envisages close collaboration with language committees at the level of local communities. A leading aspect of this working relationship is the use of national languages in the literacy programme. Notwithstanding the programme, this partnership characteristically fails to spell out explicitly the role of national languages as media of literacy learning. We have indicated that recent legislation gives autonomy to local councils and regions to organise and promote national languages in education and literacy. However, before these reforms came into effect, councils, particularly in the west and northwest regions of the country, were already engaged in literacy promotion in national languages. Nevertheless, these efforts were not by any means systematic or permanent as they depended on the dynamism, personal discretion and motivation of individual council leaderships. In some places, such as in the Ndu area (northwest region), literacy has been recognised and integrated into the council's priority projects, with the language committee, the Wimbum Literacy Association (WILA), being offered a place on the council's management board. Quite often, the leadership that favours literacy is at the same time that of the language committee or has occupied such a position in the past. It is vital to note, however, that a majority of councils have not shown much interest in this process. Council support for literacy often takes the form of infrastructure and annual budgetary allocations. The reluctance of a majority of councils to get involved in literacy is partly due to the generally lukewarm attitude of government in this matter. With the reforms on decentralisation making provision for councils and regions to support literacy, it is hoped that literacy in Cameroon will witness a tremendous boost in years ahead.

The churches have also played a major role in promoting the use of local languages in education and literacy. This has been observed within the Catholic Church where a good number of the dioceses, through their Education Secretariats, have developed local language literacy and education programmes. In fact, it is the church and particularly the Catholic Church that provided the foundation for experimenting with mother-tongue teaching in schools (PROPELCA) in the early 1980s. The Bamenda and Kumbo (in the northwest province), the Nkongsamba (in the littoral province) and the Garoua-Mokolo dioceses (in the north and far north Provinces) have played a leading role in this process. Up to now, they train literacy personnel, run schools and literacy centres and produce didactic materials. In some cases, they support the establishment of local development committees that plan and manage literacy activities. In Garoua-Mokolo Diocese, for instance, the Comité Diocésain de Développement (CDD), promotes local development in priority areas such as health and education. Through the CDD, the diocese supports training and materials production for literacy.

The Evangelical Lutheran Church has been involved in national language development and literacy since the 18th century. Among its priority target groups are women and girls. This is discernible from the fact that the provinces

it intervenes in have the highest illiteracy rates in the country, with the most vulnerable groups, women and girls, who constitute the majority of the illiterate. To strengthen its activities, the Church has put in place specialised technical structures. It runs a department of literacy and translation, a print shop and a radio station.

Other notable Churches that have made significant inputs into the literacy process are the Baptist Church and the Presbyterian Church (mainly in the northwestern part of the country) and the Evangelical Lutheran Church of Cameroon (in the east, Adamawa and north Provinces).

Specialised non-governmental organisations have also proven to be extremely active in the literacy promotion process. At the forefront of this category of actors is the National Association of Cameroonian Language Committees (NACALCO). Created in 1989, NACALCO has a mission to promote national language development and promotion in education and literacy. Its creation followed the need to establish a common platform for planning and managing the activities of language committees. Until its creation, these language committees operated in isolation, a situation that made it extremely difficult to coordinate, monitor and evaluate activities. As a federation of language committees, NACALCO ensures the harmonisation of programmes through follow-up and evaluation, and financial support to its members. Its activities are built around two main operational programmes, the Operational Research Programme for Language Education in Cameroon and the adult literacy programme. Its involvement in PROPELCA came into effect in 1991 following the dissolution of the Institute for Social Sciences. Having been involved in the promotion of PROPELCA, and convinced of the necessity for the continuation of its programmes, the proponents of NACALCO transferred PROPELCA's activities to NACALCO. In fact, PROPELCA remains a University programme. Within PROPELCA, NACALCO works with public and private educational authorities to promote mother-tongue education in schools.

PROPELCA follows an extensive trilingual approach that enables learners to learn first in their mother tongues and then in the first official language (English for English-speaking and French for French-speaking) at primary school level. At secondary school level, it proposes the learning of the second official language (French for English-speaking and English for French-speaking) and one other Cameroonian language. It has three application models, the formal model that uses the mother tongue as medium of instruction, the informal model that uses the mother tongue as a discipline, and the oral model that makes use of oral mother tongues in the building and transfer of cultural knowledge through such channels as songs, poetry, storytelling and rhymes.

Initially, only mission schools accepted the programme but today many public schools have become partners in the promotion of PROPELCA. Between 1998 and 2003, the number of public schools in the programme rose from 34 to 131. NACALCO's involvement in language research and development has made it the leading local institution for language planning and policy orientation in Cameroon. To date, it has a membership of 77 language committees. These include the 77 languages that have the minimum development level, namely, an alphabet and orthography.

Mali

According to Diarra (2005), the Education for All (EFA) programme has had a positive impact on the use of national languages for literacy and education in Mali. New projects have emerged since 1990. They include the creation of education centres for development, women's learning centres, and vocational training centres for neo-literates. However, Coulibaly (2003) highlighted that since 1986 the government has initiated several projects which were not fully funded. When Mali launched its third education project, it included a literacy component aiming to reduce regional disparities. The main goals of the literacy project were (1) to produce enough printed materials, (2) to introduce new innovative literacy methods, (3) to decentralise financing of literacy projects, (4) to recruit formal education teachers as trainers, and (5) to equip literacy teachers with bicycles in order to enable them to cover several villages.

Altogether, 350 million CFA Franc were needed to carry out the activities related to the third project, but the Ministry of Basic Education was able to mobilise only 150 million CFA Franc. Despite such financial limitations, the project managed to open 786 centres and produced literacy brochures. The printing of the brochures cost three million CFA Franc. In spite of financial constraints, the government organises literacy and post-literacy courses. The objectives of the current post-literacy campaigns are to help neo-literates maintain and enhance their literacy skills through an authentic use of the language in all socio-economic activities. With regard to women, the government wants to achieve two main goals, namely meeting their learning needs and involving them more actively in post-literacy activities in order to consolidate their skills. The promotion of a literate environment is an integral part of current literacy programmes. The National Directorate of Functional Literacy and Applied Linguistics (DNAFLA) continues to publish newspapers in the national languages. It also publishes technical booklets related to various subject matters included in the post-literacy curricula. Rural libraries have been opened in a few villages and a literacy caravan sells reading materials in the villages. The distribution of these materials is conducted during the market day when the DNAFLA can reach the greatest number of people. The Literacy Caravan was initiated as a pilot project in 1994. Since 1993, intensive writing workshops have been organised to train neo-literates. Village writers are recruited and the DNAFLA organises intensive writing sessions; these help neo-literate writers learn writing techniques such as editing newspapers and monographs, writing technical texts, poems, novels and correspondence.

Nevertheless, Mali has not been able to provide formal education to all its school-aged children. Consequently, more than 50 per cent of adolescents do not have access to education. The Ministry of Basic Education developed a partnership with UNICEF right after the 1990 Education for All conference. It implemented the non-formal education project for out-of-school children and women. This project led to the creation of a three-year curriculum for non-formal education. Twenty-three centres for children and 23 centres for women were opened. National languages are used as languages of instruction in this programme.

Plan International funded another non-formal education project for out-ofschool youths. It led to the creation of the Education Centers for Development (ECD). Coulibaly (2003) reported that in 2000 an evaluation conducted by the Ministry of Basic Education and Plan International indicated that the project had achieved significant outcomes. More precisely, the project created 202 ECDs, and enrolled more than 6,907 children in its programmes, and 413 learners in professional training. At local level, 202 committees were created to manage the project. At national level, a forum was organised to review the curricula of the ECD. Finally, the background work presented above led to the integration of the ECDs into Mali's Educational law 046, signed on 28 December 1999. This law defines the main components of basic education in Mali. Basic education includes early childhood education, fundamental instruction and non-formal education (which includes the ECDs and the centres for functional literacy) (Coulibaly, 2003: 18). A five-year World Bank-supported project (2001-2005) to the Ten-Year-Programme for the Development of Education (Programme Décennal de Développement de l'Education, PRODEC), was instrumental in supporting changes and improvements within the Malian education system (World Bank, 2007). One of its main objectives was to create, in each Malian village, a formal school and an ECD. With further World Bank funding of US\$

35 million provided in 2006 to assist the government of Mali in extending its Programme for the Development of Education (PRODEC), the groundwork for the promotion of universal completion of primary education in Mali by 2015 has been laid (World Bank, 2007).

Mali is also promoting the use of national languages in formal education with its new education reform programme *La Nouvelle École Fondamentale* which includes the promotion of bilingual schools called *Écoles de la Pédagogie Convergente* (discussed in earlier in Chapters 3 and 4). This bilingual model has produced tangible evidence showing the positive effects of familiar languages on pupils' ability to learn. Different evaluations conducted by both the Ministry of Basic Education and donor agencies show that the use of national languages as languages of instruction is critical in promoting effective learning in not only these languages but also in French.

Tanzania

As mentioned previously, among all the sub-Saharan African countries, Tanzania made the most significant progress with regard to the use of Kiswahili and the promotion of literacy among children and adults since the 1970s. The success of Kiswahili in Tanzania is based on the commitment and actions of former President Nyerere, who realised that a policy statement is not enough to promote Kiswahili but that ideology and language policy must include an effective implementation programme. The two main factors that accounted for the success of the promotion of the Kiswahili language were a sound language-education policy and the creation of governmental facilities to carry out the implementation. The government put in place six major initiatives to carry out the language policy and to promote literacy in Kiswahili, as follows (Mulokozi, 2004: 2):

- the adoption of Kiswahili as a national language in 1962;
- the adoption of the policy of Ujamaa and Self-Reliance in 1967;
- the adoption of Kiswahili as the official language of administration in 1967;
- the adoption of the policy of education for self-reliance and the promotion of Kiswahili as the sole medium of instruction in primary schools in 1968;
- the abandonment of the Cambridge School Certificate Examination in the early 1970s; and
- the adoption of the cultural policy (Sera ya Utamaduni) in 1997.

The government also created several institutions which carried out various activities including training, research and publishing. These institutions include:

- the Ministry of Culture, created in 1962;
- the Institute for Kiswahili Research (IKR), created in 1964;
- the Tanzania Publishing House, created in 1966;
- the National Kiswahili Council (BAKITA), created in 1967;
- the Department of Kiswahili at the University of Dar es Salaam, created in 1970;
- the EACROTANAL, established in 1976;
- the Institute of Kiswahili and Foreign Languages, Zanzibar-TAKILUKI, established in 1978; and
- the Tanzania culture fund (Mfukowa Utamaduni Tanzania), founded in 1998.

Two five-year development plans (1964-1969 and 1969-1974) were launched to address development and educational problems. UNESCO and the Norwegian government (represented by NORAD) provided technical and financial support through the World Literacy Programme (WLP) for the implementation of adult education programmes from 1969 to 1976. Mpogolo (1985) conducted a thorough evaluation of post-literacy and adult education in Tanzania. He suggested that in 1977 Tanzania was able to reduce significantly the illiteracy rate among adults (the illiteracy rate was reduced by 12 per cent from 1975 to 1977). The factors that account for this positive development are presented below.

- 1) Financial and technical support from UNESCO and NORAD.
- 2) The effective implementation and coordination efforts of the Directorate of Adult Education, whose work included the preparation, supervision and coordination of literacy and post-literacy programmes. It also was responsible for the development of curricula for both literacy and postliteracy programmes (literature, agriculture, health, home economics, Kiswahili, culture, defence, typing, political education, vocational training, and so on) and the coordination and supervision of literacy-supporting programmes.
- 3) The involvement of local authorities and adult learners in the planning and implementation of literacy campaigns.

- 4) Training programmes for literacy workers, teachers and educational planners. With regard to the training of literacy personnel, five main actions were taken. They included the implementation of the Mwanza Project (1969-1973) whose main purposes were the training of all types of literacy agents; the organisation of workshops and seminars; the creation of two training institutions, namely, the Folk colleges of education, the Institute of Adult Education (IAE) and the University of Dar es Salaam. The latter two are particularly involved in research related to the advancement of literacy and education in Kiswahili.
- 5) The government also developed structures that facilitated the development of a literate environment and reading culture in Kiswahili, as follows:

It created the Newspaper *Elimu Haina Mwisha* with the support of UNESCO and NORAD. It printed 100,000 copies of *Elimu Haina Mwisha* monthly and distributed it in rural libraries. An evaluation conducted in 1975 indicated that 2,781 libraries were created, and *Elimu Haina Mwisha* was read by 97 per cent of the adult literate population. (It is important to point out that the lack of printed materials is often cited as one of the barriers to the promotion of African languages as official languages in education and other socio-economic domains. Tanzania has managed to overcome this problem by creating its own printing house, and by promoting Kiswahili in government, education and other socio-cultural spaces. Literacy in Kiswahili has also been promoted through print media as well as radio and television.)

Rural libraries were primarily created as a strategy to prevent relapse into illiteracy among new literates, but they also served the entire community.

For the production of reading and educational materials, the Mwanza Project organised intensive authors' workshops in the different regions.

6) The use of Kiswahili as a medium of instruction throughout primary schools significantly influenced the development of formal basic education and literacy in Tanzania. In 1974, only 50 per cent of school-aged children were enrolled in school. In 1978, Tanzania managed to enrol 93 per cent. This was a significant achievement when one considers African countries' performance in both formal and non-formal education.

The economic recession of the 1980s, however, affected Tanzania, as it did many other nations. Wedin (2004: 72) points out that during the "1980s and 1990s Tanzania was the scene of two major structural (i.e. political) and economic changes: globalisation on an international level; and, on a national level, deregulation of the economy (the 'structural adjustment plans' imposed on Tanzania by the IMF and the World Bank)." During this period, Tanzania experienced a decline in its literacy rate. According to Aitchison and Rule (2005), several factors accounted for this situation:

"...a decline in enrolment and a high drop-out rate in primary schools; administrative problems in the education system; a lack of political will to support adult literacy since the stirring days of Nyerere and Ujamaa; and severe financial constraints in a poor country with multiple priorities" (2005: 80).

Since Jomtien, the government has implemented two major adult education programmes, namely the Integrated Community Based Adult Education (ICBAE) programme and the Complementary Basic Education in Tanzania (COBET) Program. The ICBAE is based on the Freireian philosophy of adult education and literacy. It integrates a community-based and learner-centred approach in order to address gender equity and sustainable development. The programme also seeks to empower learners through not only the curriculum it offers but also the income-generating activities which lead to ownership. The COBET programme is designed for pupils (11-18 years) who dropped out of primary schools and those who did not have the chance to attend school. Even though both programmes are effective, the main challenge is finding the money for expansion. Aitchison and Rule (2005) argue that the programmes will face serious problems when (if) donor funding is withdrawn.

From the discussion above on the effect of language policies and the use of African languages in Africa, Tanzania shows that in order to create an effective literacy policy that stimulates the development of a literate culture and environment, African leaders must have a clear vision, develop effective multilingual policies and possess the political will to implement these policies. Kiswahili has become a uniting language as it serves as a lingua franca (language of wider communication) for 99 per cent of the population in Tanzania (Brock-Utne and Hopson, 2005: 51). Today, Kiswahili is used as a national language and a lingua franca in Eastern and Central Africa, and in a few Southern African countries. It also serves as an international language that is taught in several African, European and American universities. An extensive body of literature has been produced in Kiswahili. This language is also used for radio broadcasting not only in countries such as Tanzania, Kenya and the Democratic Republic of Congo, but also in Rwanda, the United States of America (Voice of America), in the United Kingdom (BBC Radio), in China (Radio China) and in Germany (Deutsche Welle).

Brock-Utne (2005) also highlights that its use in all socio-economic, educational, cultural (the majority of newspapers in Tanzania are published in Kiswahili), legal and political domains since 1967 has enabled Kiswahili to become a highly-sophisticated language which can express all types of realities and knowledge, including science and technology. Major literary and scientific works are produced in this language. The proliferation of Kiswahili has shown that an African language can be used in domains often reserved for European languages such as English, French, Portuguese and Spanish (Brock-Utne and Hopson, 2005). In this regard:

"T[t]his language [Kiswahili] is used as a language of instruction through all the seven years of primary school and in some teacher training colleges. The Department of Kiswahili and the Institute for Kiswahili Research at the University of Dar es Salaam use Kiswahili as the language of instruction in all its courses and meetings. They show by their example that an African language may well be used for the most sophisticated discussions and for research" (Brock-Utne and Hopson, 2005: 51).

Yet the main questions, which surround so many debates among Africanists remain. How can other African countries achieve the type of success that Tanzania has been able to achieve with its national language policy? Can, and should, African leaders reproduce the type of language policy that Nyerere implemented in Tanzania? In the era of democracy and globalisation what would be the role of the state, the community and the regional and international organisations in the promotion of national languages and the creation of literate environments in African societies?

One may argue that President Nyerere was successful because he was able to impose Kiswahili in a multilingual country during a one-party regime. This imposition may not be possible today because most African countries have adopted democracy as a new system of governance. The adoption of a language policy that drastically changes the status quo must be democratically negotiated. Governments must welcome this change positively as it provides a political and legal framework for involving all stakeholders. However, such change requires careful evaluation before any particular language policy option is adopted. According to Wolff (2006b) the problem is not designing language policy. The problem lies in the strategies that governments use to convince all stakeholders of the relevance of the policy to their lives or particular interests. With regard to the promotion of multilingual and multicultural education in Africa, Wolff suggests that in a democratic society the government must be able to develop strategies for "communicating the benefits of reformed quality primary education".

Zambia

According to Sampa (2005: 73), "the Primary Reading Program (PRP) implemented in Zambia is one of the few programmes that have succeeded on a large scale". Between 1999 and 2002, the Ministry of Education conducted two evaluations to assess the effectiveness of the PRP. Both evaluations showed that children's performances in reading in both Zambian languages and English had improved. There are six main factors that account for the success of the PRP:

- an appropriate language policy that uses local languages familiar to children to teach reading and writing;
- the allocation of appropriate time for teaching literacy in elementary schools. Literacy and numeracy became a central element of the curriculum;
- the implementation of an effective teacher-training programme that includes initial training for student teachers and in-service training offered to teachers who are already serving in the schools;
- sensitisation of all stakeholders (parents, teachers, children and policymakers);
- creation of attractive classrooms to motivate children; and
- promotion of teamwork among teachers and ministry of education officials (Sampa, 2003: 45).

From 1990 to 1999, the Ministry of Education opened learning centres and distance education courses. Mwansa (2004) conducted a needs assessment study to determine what the potential learners (200 respondents) would want to learn. He found that the respondents wanted to learn farming techniques, health education, business management, local languages, home management, wildlife, gender issues and English. After this assessment, the government launched a new literacy programme. According to the EFA report (UNESCO, 2003), 46,000 youth and adults benefited from this programme. In

addition, 95,000 primers (reading materials for literacy) were printed, 1,926 teachers received training and 98,701 people received literacy instruction in the national languages. Seventy-three per cent of the participants were women. In 1990, 41.3 per cent of women were illiterate. In 2003, 25.2 per cent were classified as such. This shows that the illiteracy rate among women dropped by 16.1 per cent between 1990 and 2003.

A survey conducted by Aitchison and Rule (2005) in the countries of the Southern African Development Community (SADC) indicated that Zambia may achieve a 94.2 per cent literacy rate by 2015. It is important to indicate that disparities still exist between urban and rural areas, and also between men and women. It is estimated that by 2015 the gender illiteracy rate gap will have been narrowed as follows: 5.1 per cent for men versus 6.5 per cent for women. This positive trend can be attributed to the recent educational and language policies implemented by, namely, the Primary Reading Programme in formal education and the National Literacy Policy aimed at the reduction of poverty in the country.

Mumba (2002) argues that Zambia must continue to address the illiteracy issue among young adults in order to prevent social unrest and address marginalisation issues. The illiteracy rate among youths (14 to 20 years old) is greater than that of adults who are 21 to 45 years old. This has negative social and economic consequences because Zambia's population is relatively young and the country relies on the active involvement of this particular population in socio-economic activities. It is also a challenge to address effectively the HIV/AIDS problem with a high rate of illiteracy among the most vulnerable people, namely, adolescents and young adults.

What has been learned from the review of literature on language policy and the use of African languages and literacy?

The current language policies promoted in most African countries undermine the use of national languages for the development of education and societal literacy. The implemented policies do not allow the citizens to be active participants in sustained development and thus fulfil their civic duties and responsibilities within the community. In this context, the language policies promoted in Africa negatively affect the promotion of democracy and the decentralisation of governmental institutions. In contrast, the use of languages that people speak, understand, read and write is crucial.

Many high-level meetings have taken place in Africa; these have often resulted in declarations and detailed plans of action. Governments have also created institutional infrastructure (Departments of literacy and adult education, Ministries of Non-formal Education, literacy and adult education centres). Local and international NGOs have also contributed tremendously to this endeavour. This suggests that the visions and philosophies have been defined. However, none of the visions and philosophies has been clearly realised in sub-Saharan African countries, except in Tanzania. Lack of political will and extreme poverty are the two main factors that prevent African governments from adopting and implementing the use of national languages in formal domains.

Since Jomtien, a few African governments have promoted, at a smaller scale, new models of basic education in formal and non-formal domains that have produced encouraging results. In francophone Africa, one can cite the *Écoles de la Pédagogie Convergente* in Mali, the *Écoles Bilingues* in Burkina Faso, and PROPELCA and NACALCO's bilingual schools in Cameroon. These are experimental schools that use national languages and official languages (transitional bilingual model) and a culturally-adapted curriculum to promote quality basic education in areas in which the governments have not been able to open formal primary schools. The success of these experimental schools is based on their ability to promote dual literacy among children, adolescent and adults, and an education system that helps learners to be more integrated and productive in their social and cultural milieu.

With regard to cost-effectiveness, Kathleen Heugh (2006: 23) suggests that "the arguments that cost prevents mother-tongue education are in fact based on flimsy perceptions rather than empirical evidence". Indeed, in Burkina Faso, Ilboudo (2003) indicates that through the reduction of the number of years for primary education the *Écoles Bilingues* run by OSEO are more cost-effective than the government-run primary schools.

In anglophone Africa, the Regenerated Freirean Literacy through Empowering Community Techniques (REFLECT) projects in Uganda and Tanzania offer a new approach to literacy. It not only integrates the acquisition of literacy skills but also adds an empowerment dimension that helps learners think over their own lives and circumstances, and learn how to learn and thus be able to make informed decisions. These new models of education must be considered for expansion at national levels and African countries should learn from each other instead of adopting only models of education from Western societies.

The Jomtien (1990), Beijing (1995), and Dakar Conferences stated the need to promote girls' and women's education. The studies reviewed indicate that little progress has been done in that regard. It is true that campaigns have been organised to sensitise policy-makers, communities and parents, but research indicates that girls and women continue to lag behind boys and men as far as access to basic education is concerned.

Lack of financial means to execute the programmes has undermined governments' efforts to promote literacy. Due to extreme poverty, African governments are also subjected to changes occurring at international levels. This affects how they plan and execute literacy and non-formal education programmes. Dependence on international aid often limits governments' ability to promote the type of policies they adopted in their political declarations and plans of action. Afrik (1995: 5) points out that "since Jomtien there have been new waves of funding sources from four main partners of African education: UNDP, the World Bank, UNESCO, and UNICEF". Multilateral and bilateral agencies have also contributed to the promotion of basic education, including literacy and adult education. These agencies include IFOMA, DANIDA, CORD, CIDA, SIDA, IIZ/DVV, BMZ, the Islamic Call Bank, the African Development Bank and ISESCO. However, overall, literacy and non-formal education have not been the main educational priority of governments and international development agencies. The focus and investment have largely been on formal education. Such a policy strategy has had a negative impact on the promotion of literacy and non-formal education in Africa. Unfortunately, the huge investments in formal education have not produced desirable results. Formal basic education in most African countries is ineffective and inefficient due largely to the promotion of inadequate education language policy.

Fortunately, in recent years the World Bank has recognised the pertinence of bilingual education in Africa. An example of this change of perspective is evident in its support for the promotion of the *Écoles de la Pédagogie Convergente* in Mali and its review of literature on bilingual education in Africa (2005). The conference of the Ministers of Education of francophone Africa (CONFEMEN) issued several policy papers calling for the promotion of "langues partenaires" or "language partners" (in this case it refers to and means African languages) for basic education. Evidently, the momentum is there. Governments must seize it and promote literacy and the use of African languages in education and development.

There is a serious shortage of literacy specialists in Africa, particularly in francophone countries. It is therefore difficult to promote literacy and non-formal education in this context. The implementation of the "Faire Faire Strategy" is difficult in countries such as Benin, Burkina Faso, and Mali mainly because the strategy relies on the availability of human resources who can develop programmes, implement them and evaluate them. The decentralisation of the basic education sector largely depends on the availability of qualified human resources such as literacy teachers and supervisors. Expansion of best practices and policies depends not only on the availability of funds but also on the availability of relevant expertise to carry out the activities.

Anglophone countries have made significant progress in building capacity in the area of literacy and non-formal education. Francophone countries can learn from anglophone experiences. Tanzania offers the best practice with regard to human resource development for literacy and adult education. Tanzania has been able to promote literacy in Kiswahili in all socio-economic and educational domains because it created three key institutions, namely, the Folk Development Colleges, the University of Dar es Salaam and the Institute of Kiswahili, all of which train literacy teachers and professionals.

One of the major problems highlighted in all the studies (except those related to Tanzania) is the lack of an adequate literate environment in the national languages which helps neo-literates to continuously use the newly-acquired skills and competencies to carry out socio-economic, political and cultural activities in their languages. People are, at the beginning, enthusiastic to learn how to read and write in their languages. However, they quickly realise that they have nothing to read in the national languages besides the literacy brochures they get from the classes. In addition, they cannot use their reading and writing skills to conduct transactions with civil servants. Neo-literates are not encouraged to use their competencies in areas such as courts and health services because the civil servants cannot read and write in the national languages.

The promotion of national languages at the local and regional levels, and in public services such as health facilities, the courts, schools and the local, regional and national assemblies creates an enticing environment for the use of national languages in both oral and written communication. It also influences the creation of a literate environment.

Publishing in national languages is, therefore, an important aspect that must be tackled. To promote this sector, governments and international organisations should encourage the publishing sector by promoting a language policy which promotes national languages in both formal and non-formal education. They should also support private publishers by eliminating customs and excise duty on paper imported for the production of printed materials for literacy, education and culture. Governments can encourage transnational book production for trans-border languages by minimising taxes and tariffs on books and raw materials used to produce books. (See Chapters 7 and 8 for a detailed discussion on publishing.)

Perspectives

According to the late Joseph Akoha (2001), no country in the world has achieved national integration (nation-building) by repressing the cultures and languages of its population. It is, therefore, inconceivable that African countries would escape this basic socio-historical rule.

"Nation building...cannot be successfully achieved in such societies by repressing the cultures and languages of some groups in favour of foreign languages or cultures, nor even in favour of a locally dominant group. On the contrary it is in the free interplay of the juxtaposed cultures mediated by literacy and literature in local languages that a nation may emerge, where every component feels involved and concerned. This leads to issues of democracy and literacy" (Akoha, 2001: 147).

Language, culture and literacy are elements that define individuals and their sense of belonging to a group or a nation. It is, therefore, imperative that African governments recognise the true value of the national languages for the development of national identity and the promotion of democracy. Governments must arm themselves with the political will in order to implement the vision and action plans elaborated in their educational policy documents and regional political declarations.

The use of national languages is a critical factor in the promotion of democracy, good citizenship, effective decentralisation and training of local officers and elected representatives.

Africans need to develop technological literacy in order to be active participants in the production and use of global knowledge. In the information technology era, the speed with which one accesses information and acquires knowledge determines not only the level of individual development, but that of society as well. In this context, African countries must integrate educational systems and curricula information and communication technologies (ICT). The role of the media is in this respect important not only for the mobilisation of people for literacy and basic education, but also for the acquisition and dissemination of information and knowledge. Local radio stations have been the most effective tools for politically mobilising the masses but also for mass education. They use national languages and they are the most widely used source of information in Africa. They can be used effectively for basic education and literacy. The use of cellular phones even in the most remote areas has facilitated the participation of rural and urban people in "call-in" radio programmes. The Internet has also facilitated communication. In urban areas, there is a proliferation of private communication centres that use both telephones and computers. It is, therefore, important that literacy and non-formal education programmes recognise the availability of these information and communication technologies in Africa and acknowledge the fact that people are already using them. The integration of ICT in the literacy programme can be a motivating factor for the recruitment of learners. The distance education programmes implemented in South Africa, Nigeria, Tanzania, Kenya, Botswana and Swaziland have provided the opportunity for adult learners to avail literacy and continuing education courses using radio, television, computers and correspondence (Afrik, 1995). In West Africa (Burkina Faso, Gambia and Mali), radio and newspapers are the main technologies used for distance education.

The demand for literacy and basic education should be tied to the question of relevance and effectiveness. Literacy programmes must be contextualised in order to be effective. Consequently, a needs assessment that defines the demand for literacy programmes must always be conducted before setting up the programme. The learners must be included in the design, monitoring and evaluation of the literacy and adult education courses. This strategy must foster ownership and leadership among participants. With regard to girls and women's education, a demand-driven approach includes the concern of women and the context within which women and girls use literacy. The research conducted by Alidou (2005) and Papen (2005) on women's literacy in Niger and Namibia, respectively, clearly indicate that quantitative analysis alone cannot define the literacy needs of the learners. Consequently, they argue for the integration of qualitative analysis based on ethnographic research to define not only "the learners' everyday-life uses of literacy, but also their conception of literacy and their literacy-related aspiration" (Papen, 2005: 212). Papen rightly suggests that these three elements must be understood within the social, political, cultural and historical context of the learners' community. Therefore, understanding this context implies understanding the effect of colonisation, traditions and cultures and economics on the lives of girls and women in Africa. Finally, ethnographic research can significantly help literacy curriculum developers and educational programme planners understand the meaning of literacy for people and help them to develop more responsive literacy programmes.

Recommendations

The recommendations herein do not ignore, but augment, the excellent work produced in many forums related to language policy and literacy in Africa. Excellent technical and political recommendations were formulated in each one of these forums. Notable forums include the OAU Cultural Charter for Africa (1976); the OAU Lagos Plan of Action (1980); the Declaration on the Cultural Aspects of the Lagos Plan of Action (1985); the OAU Language Plan of Action for Africa (1986); the draft charter for the promotion of African languages in education produced in 1996 in Accra; and the Harare Declaration (1997), which evolved from the intergovernmental conference on language policies in Africa organised by ADEA.

- a. Without effective language policy, it is not possible to promote literate environments in schools and communities. Namibia and Tanzania have shown that language policy is the most critical encouraging factor in the development of a culture of reading and writing in national languages.
- b. African governments must actualise the language policy plan of action formulated at the intergovernmental conference in Harare in 1997. This

plan includes not only actions to be taken at national level, but also at regional and continental levels for the promotion of adequate language policies and literacy in Africa. The leadership role of governments has been clearly defined in the Harare plan, which integrates a vision, a policy framework and the activities that governments can organise at regional, national and local levels to promote literacy in schools and communities in order to create literate environments. The plan also takes into account the development and promotion of cross-border languages as viable means of communication in formal and non-formal domains.

- c. The adoption of multilingual and multicultural education policies can influence the involvement of the publishing sector in the production of print materials in national languages.
- d. Non-formal education must be viewed as a critical sub-sector of education and development. It is recommended that adequate funding be allocated nationally and internationally for the effective involvement of this subsector. Models of bilingual education promoted in West Africa (*Écoles Bilingues* in Burkina Faso, for example) show that there is a possibility for cross-fertilisation of formal and non-formal education.
- e. The partnership between governmental institutions and civil society (local, national and international NGOs) must be strengthened in order to integrate literacy and basic education in all development programmes. NGOs must be given opportunities through training to enhance their operational capacities. Their role is critical in promoting literacy for democracy, peace and development in African countries. In the past NGOs have been neglected. Yet they have, in recent years, replaced governments in many communities as far as the provision of basic education and health care (e.g. HIV/AIDS education) is concerned. They have also mobilised the population for the promotion of democracy and good governance at national and local levels.
- f. There is a need to adopt a demand-driven approach that considers the literacy and educational needs of children and adults. Literacy and basic education programmes must be conceptualised by taking into account the needs and goals of citizens. They must also use a constructivist approach that recognises that learners are knowledgeable individuals. They acquire new knowledge by taking into consideration what they already know. Here, relevance of literacy programmes depends on their ability to utilise relevant curricula that stimulate learning and thus produce better and relevant outcomes for learners.

- g. The relevance of curricula implies recognising diversity among learners and responding to diverse educational needs. Such an approach is crucial if girls' and women's concerns are to be addressed by literacy programmes.
- h. Often, lack of educational materials is advanced as one of the main problems related to quality instruction in literacy programmes. Reader materials are mandatory for the acquisition of literacy skills. A primer-only reading approach to literacy is insufficient. Instead, approaches that use primers and influence the production of texts in the schools and communities are necessary. In Mali, for example, students are encouraged to become writers through the writing of "la mémoire de classe". Children from first to sixth year produce these short stories. They include stories about themselves, their families, their dreams and hopes, their communities, as well as what they know about the outside world. Writing these stories is a process which teaches children all the various steps that are required for composing a text. This approach integrates holistically oral language development (story-telling, thinking before writing) and the development of writing and reading competence. Moreover, speaking, writing and reading are language activities that are done in social contexts. Therefore, children learn their real purposes. A similar approach is promoted in REFLECT, an adult literacy programme promoted in Uganda and Tanzania. This approach, based on Paulo Freire's philosophy, relates the development of literacy skills to the development of empowering strategies in adult education. It also includes a writing component that encourages adult learners to write their own stories. Therefore, learner-centred participatory approaches are fundamental pedagogical approaches that must be promoted in formal and non-formal education literacy programmes.
- i. In the information age, the integration of ICT into school and community literacy programmes is crucial. Children and adults in Africa are already using computers, cellular phones and radio to communicate locally, nationally and internationally. Even non-literate individuals use these devices. It is inconceivable that educational programmes ignore this development. South Africa promotes ICTs in its literacy programmes. Other African countries should learn from South Africa and find ways of integrating technologies and information management systems into their literacy programmes.
- j. Financing at a large scale is needed to pay literacy teachers, curriculum specialists and literacy and adult education programme developers

adequately. Funding is needed for professional development programmes to build capacity for literacy and adult education in Africa. Funding is also needed to implement plans of action. Here, the role of the World Bank and other multilateral and bilateral development agencies is crucial. Investing in literacy must be viewed as a multi-pronged strategy to promote basic education, alleviate poverty, combat HIV/AIDS, promote equality and social justice in African societies and promote human development. No country has been able to achieve a decent level of development without reaching a decent level of individual, communal and societal literacy. It is, therefore, exceptionally difficult for African countries to achieve an adequate level of development with the current state of literacy.

Chapter 6 Cost implications of the provision of mother-tongue and strong bilingual models of education in Africa

Kathleen Heugh¹

"Fifty percent of the world's out-of-school children live in communities where the language of schooling is rarely, if ever, used at home. This underscores the biggest challenge to achieving Education for All (EFA): a legacy of non-productive practices that lead to low levels of learning and high levels of dropout and repetition. In these circumstances, an increase in resources, although necessary, would not be sufficient to produce universal completion of a good-quality primary school programme" (World Bank, 2005: [1]).

Whenever mother-tongue education issues are debated, there is a series of predictable reactions from senior government officials responsible for education as well as from many education specialists. These reactions usually include the following responses, which are linked to a belief that it is too costly to use African languages in education:

1. We know that mother-tongue education is best, but this country has too many languages; it is not possible to develop all of these languages for use in education.

1 The author gratefully acknowledges helpful comments and suggestions from a number of people including: Wilfried Goertler, Adama Ouane, Christine Glanz and Carol Macdonald.

- 2. Mother-tongue education costs too much.
- 3. There is no alternative but to continue with the current practice.

Respected scholars on the continent, like Ayo Bamgbose (e.g. 2000a) and Pai Obanya (e.g. 1999a, b), amongst others, have taken these and many other arguments and shown that they are based more on fear and uncertainty about possible change, than on material reasons which prevent change. The purpose of this chapter is to explore some of the issues around the costs of implementing both successful and unsuccessful language education programmes. It will also outline some of the initiatives and strategies that can be taken, with minimal cost implications. They can be taken in order to continue and expand the work that has already begun in terms of developing stronger education programmes in African languages.

There are few studies on the costs and benefits of different education programmes, especially in Africa. Few, if any, studies demonstrate how much is spent on unsuccessful models of education provision in Africa. A comprehensive search has not yielded any national government-funded study that has compared the costs of second language/foreign language/international language of wider-communication models with bilingual (mother tongue plus international language of wider communication) models in education. The emphasis in this chapter, as in those that precede it, is that formal education in Africa should provide school pupils access to high-level achievement in both an African language and an international language of wider communication. At no point is there a suggestion that mother tongue (or African language) is enough. There is no suggestion that the second language/foreign/language of wider communication is sufficient. Both are necessary in order to meet domestic/ regional and global demands for equitable education and social and economic development. The goal needs to be strong bilingual education. Cost-effective mechanisms need to be established to ensure that this goal is reached.

There is no rigorous, methodical and systematic evidence which demonstrates that in the medium- to long-term:

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

If we consider the evidence we do have, however, it becomes clear that in most countries of Africa, we continue to invest in programmes that are designed to fail. This is most definitely not cost-effective or economically wise. It is therefore necessary to change from a dysfunctional approach to one that may offer a good return on investment.

Continued investment in programmes designed to fail

The evidence is clear: only well-resourced programmes that use the first language as medium of instruction for a minimum of six years will allow students an equal chance of becoming sufficiently proficient in the international language of wider communication and their other academic studies. The discussion of an emerging trend of convergence of approaches towards early-exit transitional models, with the possible recent exceptions of Ethiopia, and other possible exceptions in Eritrea, and Tanzania, is disturbing in light of the evidence.

Subtractive and early-exit transitional models can only offer students a score of between 20 per cent and 40 per cent in the international language of wider communication by the end of school and this means failure across the curriculum. 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 year six more than 55 per cent 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 per cent have reached the desired level of literacy. The investment required to keep students in the system to this point therefore does not yield a good return. It is a poor investment. It is a waste of expenditure to retain students in the system after year six if they have not reached the minimal level of literacy achievement at this point. The current literacy and language models are so ineffectual that they result in at least 55 per cent of students leaving school by the end of year six as unsuccessful learners (see discussion in Chapter 2, especially Table 2.4 and Figure 2.1). This undermines the Millennium Development Goals and UNESCO's Education for All (EFA) agendas.

There are, of course, other reasons that compound the challenges to successful education in Africa. These include poverty, hunger and, increasingly, the impact of HIV/AIDS. There is evidence, however, from closely-monitored longitudinal

studies in the USA (Ramirez et al., 1991; Thomas and Collier, 1997; 2002) that even where poverty, hunger and the incidence of HIV/AIDS are less extreme, students in programmes similar to those in Africa (early-exit from mother tongue to English) can only be expected to reach an achievement of about 37.5 per cent in the language of learning by grade/year six. The most recent South African systematic study shows that the national average achievement for students in year six is 38 per cent for literacy in the language of learning, and 27 per cent for mathematics (DoE, 2005). These statistics are inflated by the 20 per cent of Afrikaans- and English-speaking students who have mother-tongue education and who performed significantly better than African-language speaking students who are in English as a second language programmes. When these findings are compared with the Thomas and Collier studies (1997, 2002) in the US, it becomes clear that one can expect a literacy achievement of 37.5-38 per cent in grade/year six under well-resourced conditions (see Chapter 2, Figure 2.1). In less well-resourced conditions, such as in sub-Saharan Africa, a lower level of achievement should be expected of learners who are in second language programmes.

To summarise, the research discussed in earlier chapters of this report show that early-exit literacy and language models do not offer most students the opportunity of education success in wealthy, developed contexts in countries such as the USA and Canada. They also do not offer education success in African countries. If they cannot offer a better return of investment in settings where pupil:teacher ratios are significantly lower than in African countries; where teachers are better trained/qualified; and the resources in the schools are far better than those in African countries, then how can they succeed in Africa? The answer is simple: they cannot. Expenditure on models which are not designed to succeed is therefore wasteful.

The cost implications

"You learn only what you understand...without changing the language used to teach, basic education can be neither effective nor efficient. Language difficulties result in higher dropout and repeater rates that cannot be reduced" (Bergmann, 2002: 4). Lewin (2001a, 2001b, 2004) shows that primary education is not sufficient to meet the demands of development. The emphasis on universal primary education since Jomtien in 1990 has taken some of the attention away from secondary school provision. There needs to be a much higher throughput from primary to secondary education in Africa. Two-thirds of the countries with the lowest gross enrolment rates at secondary (GER2) level are in Africa, and of these, most are in francophone countries (Lewin, 2001b: 21). It is becoming increasingly "... important to reshape investment in secondary schooling so that it can promote higher-level learning goals effectively and be accessible to greater proportions of the population" (Lewin, 2001a: 11-12).

Yet, as Lewin shows, the unit cost of secondary education is usually much higher in countries with low GER2. This means that secondary school becomes a point at which inequalities escalate, and the unit cost needs to be reduced in order to allow greater access. He estimated that annually, an additional US\$ 2.3 billion (at an average recurrent cost of \$100 per pupil) is required to provide a GER2 rate of 50 per cent across sub-Saharan Africa (Lewin, 2004: 31). These recurrent costs are averages for sub-Saharan Africa with extreme differences contingent on gross national income (GNI) per capita or gross domestic product (GDP) and or the gross national product (GNP) of each country depending on the model used for calculations. Lewin explains:

"Data on the unit costs of secondary is incomplete and unreliable. [UNESCO Institute for Statistics] UIS (2004) indicates that average secondary unit costs as a percentage of GDP per capita average 25% to 40% depending on the year taken (based on 10-15 cases in different years). This can be compared with other recent estimates (Mingat, 2004) that suggest that unit costs average about 31% of GNP per capita at lower secondary, and 63% at upper secondary.

If these kind of levels are taken as indicative, then for the countries with most unenrolled secondary age children which have a GNI/capita of about \$340, the average unit cost would translate into about \$100 per student at lower secondary and \$220 at upper secondary. Given all the uncertainties of these kind of estimates these seem plausible magnitudes which are consistent with several low income country cases – the overall public unit costs of secondary in Tanzania, Malawi, Rwanda, Uganda and Ghana all fall in the range of \$100-\$150. The high income countries have greater unit costs but not necessarily greater costs relative to GNI/capita – South Africa's public unit costs for secondary are about \$750 which is about 25% of GNI/capita" (2004: 27).

Yet costs and funding for secondary school represent only one of many issues in Sub-Saharan Africa: in order for students to have access to secondary school, they need to remain in the system to the end of primary. Discussions in earlier chapters demonstrate that this is not the case. For socio-economic development, we need to facilitate greater retention, lower drop-out rates in primary, higher throughput to secondary and lower costs in secondary education. If students are going to be able to make progress in secondary school, and if the expenditure on their secondary education is to be costeffective, they must have grade-level literacy and numeracy proficiencies at entry to secondary. If they do not, there is a strong chance that investment will not yield the returns sought or the development objectives.

Psacharopoulos (1996: 430) provides a taxonomy for economic analysis in education which might better inform policy decisions:

First Level Analysis

- Unit cost of education: by schooling level; by curriculum type; of pedagogical inputs; in public and private institutions.
- Benefits of education learning outcomes; earnings/productivity of graduates – by schooling level; by curriculum type; in public vs. private sectors.

Second Level Analysis

- Efficiency assessment: cost-effectiveness analysis, cost-benefit analysis.
- Equity assessment: costs incidence, benefits incidence.

The assumption is that a concern for both the efficient use of expenditure in education and equitable distribution of resources drives decision-makers. Although there is a substantial volume of research on the economics of education, there is minimal research available in relation to the economics of different language education models in the system, especially in Africa. François Grin (2005) argues that the costs of implementing language policies and models that use the mother tongue have been misunderstood.

"...[C]osts are relatively little known and little understoodCost is meaningless in itself – it makes sense only in relation with what one gets in return for the cost incurred" (Grin, 2005: 11). "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).

South Africa, one of the few countries in the continent to have a GER2 of more than 50 per cent, does not, however, show a good rate of return on its investment. About 27 per cent of those who have started school have exited the system with a school-leaving certificate in year 12. Figures from the late 1990s and early 2000s show that South Africa spends approximately 5.5 per cent of its GDP or 22 per cent of its non-interest section of the budget on education. The 2007 edition of the UNESCO Global Education Digest states that the total South African expenditure as a percentage of GDP on all educational institutions is 5.3 per cent, illustrating a consistency over nearly a decade. (Table 6.1 shows the expenditures as a percentage of GDP for all of sub-Saharan Africa, according to the latest data available [2007] from the UNESCO Institute of Statistics.) South Africa has performed poorly, coming last in the Trends in International Mathematics and Science Study (TIMSS) assessments in 1999 and 2003. Other studies show that the level of literacy of school-leavers has declined rapidly since 1992, rendering most schoolleavers unemployable and unable to gain access to tertiary institutions. This is despite an official school-leaving pass rate that escalated dramatically between 1999 and 2004. Of those who do pass, and who pass well, are those who have mother-tongue education throughout the education system. They are first language speakers of English and Afrikaans. Despite efforts since 1994/5 to reallocate resources and reduce the inequities in the system from the apartheid era, less than one per cent of African learners in 2000 at year 12 passed mathematics and science in the examination which would allow them access to tertiary education. Therefore, if the Psacharopoulos taxonomy (discussed above) were to be applied here, it is likely that the system would not be rated highly in terms of efficiency or equity. The evidence points towards the need to improve resources for mother-tongue-medium education and bilingual education, yet the final blockage in the system is the argument advanced by most governments that mother-tongue-medium education is too costly.

Table 6.1.

Expenditure on educational institutions and educational administration as a percentage of GDP (public sources of funds only)

| AngolaImage and the set of the | Sub-Saharan Africa | Total | Sub-Saharan Africa | Total |
|---|--------------------------|-------|-----------------------|-------|
| Botswana8.80MaliBotswana8.80MaliBurkina Faso4.60Mauritius4.50Burundi5.10Mozambique3.70Cameroon1.80Namibia6.90Cape Verde6.30Niger6.90Central African RepublicNigeria3.20Chad2.10Rwanda3.20Comoros2.20Senegal5.40Congo2.20Senegal5.40Congo2.20Seychelles5.40Democratic Republic of the CongoSouth Africa5.30Equatorial Guinea5.40South Africa6.20Ethiopia6.10Togo5.20Gambia1.90United Republic of5.20Gambia5.40Swaziland6.20Ethiopia6.10Togo5.20Gambia5.40Sundia5.20Guinea5.40Sumaia5.20Guinea5.40Sumaia5.20Guinea5.40Sumaia5.20Guinea5.40Tanzania1.80Cuinea-Bissau6.70Zimbabwe1.80Kenya6.70Tanzania1.80Leotho10.10Kerage of reporting4.80 | Angola | | Madagascar | 3.00 |
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| Cape Verde6.30NigerCentral African RepublicNigeriaChad2.10RwandaComorosSao Tome and PrincipeCongo2.20SenegalCongo2.20SenegalCôte d'IvoireSeychelles5.40Democratic Republic ofSierra Leone5.30the CongoSouth Africa5.30Equatorial GuineaSouth Africa5.30Fritrea5.40South Africa5.30CabonSouth Africa5.30South AfricaGabonS.40Svaziland6.20GambiaS.40United Republic ofSouth AfricaGabaniaS.40South Africa5.20GanbiaS.40South Africa5.20GuineaS.40Subalia5.20GuineaS.40SubaliaSouth AfricaSouth AfricaS.40South AfricaSouth AfricaGabonS.40SubaliaSouth AfricaGuineaS.40SubaliaSouth AfricaGuineaS.40SubaliaSouth AfricaGuineaS.40SubaliaSouth AfricaGuineaS.40SubaliaSouth AfricaGuineaS.40SubaliaSouth AfricaGuineaS.40SubaliaSouth AfricaGuineaS.40SubaliaSouth AfricaGuineaS.40SubaliaSouth AfricaGuineaS.40SubaliaSubaliaGuineaS.40Subalia </td <td>Burundi</td> <td>5.10</td> <td>Mozambique</td> <td>3.70</td> | Burundi | 5.10 | Mozambique | 3.70 |
| Central African RepublicNigeriaNigeriaChad2.10Rwanda3.20Comoros2.20Sao Tome and PrincipeCongo2.20Senegal5.40Côte d'Ivoire2.20Seychelles5.40Democratic Republic ofSierra Leone5.40the Congo-Somalia-Equatorial Guinea5.40Somalia5.30Eritrea5.40Swaziland6.20Gabon6.10Togo-Gambia1.90United Republic of5.20Guinea5.40Smaziland5.20Guinea1.90Inited Republic of-Guinea5.40Simania1.80Kenya6.70Zambia1.80Kenya6.70Inited Republic of-Kenya6.70Zambia1.80Kenya6.70Inited Republic of-Kenya6.70Zambia1.80Kenya10.10Average of reporting4.80 | Cameroon | 1.80 | Namibia | 6.90 |
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| FormationFormationFormationEquatorial Guinea5.40South Africa5.30Eritrea5.40Swaziland6.20Ethiopia6.10Togo0Gabon-Uganda5.20Gambia1.90United Republic of-Ghana5.40Tanzania1.80Guinea2.00Zambia1.80Guinea-Bissau6.70Kenya6.70Average of reporting4.80 | Democratic Republic of | | Sierra Leone | |
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| Guinea-BissauImage: Constraint of the second se | Ghana | 5.40 | Tanzania | |
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| | Kenya | 6.70 | | |
| Liberia countries | Lesotho | 10.10 | Average of reporting | 4.80 |
| | Liberia | | countries | |

Source: UIS Global Education Digest 2007

Which costs are specific to language provision in education?

Although governments frequently cite cost as the prohibitive factor, as mentioned earlier, there are no studies which show that subtractive and early-exit models are in fact cheaper. We can only compare costs and work out if one model is indeed more expensive than another if we use the same criteria for measurement. Table 6.2 includes a list of items related to the implementation of formal school education and which items incur costs. This is framed in terms of UNESCO's Education for All goal: providing *quality education*.

Table 6.2

Implications for costs in the delivery of quality education models

| | English/French/ Portuguese/ Spanish [E/F/P/S] only | Initial African language [AL] literacy + early- exit to E/F/P/S | Late-exit MTE, transition to E/F/P/S | Strong/additive bilingual: MTE + E/F/P/S to end of secondary | |
|---|---|--|--|---|--|
| Curriculum design | Costs will be the same across all models | | | | |
| Training teachers to implement curriculum | Costs will be the same across all language models. This includes upgrading of expertise – so that teachers are sufficiently competent to teach the content of their year/grade or subject area specialisation. | | | | |
| Improving teachers' own language proficiency and academic literacy skills | Many teachers do not have adequate academic literacy skills or proficiency in the language of learning and teaching. In order to meet the Education for All goal of quality education, teachers need further education and training so that they have the necessary language and literacy skills and resources to provide quality teaching. | | | | |
| Equipping teachers with the appropriate literacy and language for teaching each subject/ curriculum area | All language and subject teachers need to understand their own role in developing literacy and appropriate language proficiency across the curriculum. All teachers need training so that they can help their students develop the necessary literacy and language expertise for each subject or grade level. See further cost implications in Table 6.3. | | | | |
| Textbook design | Textbook design is a one-off cost, but different language versions will require additional layout costs (see Chapter 8 and Vawda and Patrinos, 1999). | | | | |
| Textbook production and provision | The same number of textbooks is required, no matter which model is selected. Where several different language versions are required, as long as the print-run exceeds 15,000-20,000, the additional per unit cost is minimal (see Chapter 8 and Vawda and Patrinos, 1999) ² . | | | | |

2 This is a generous estimate. In an earlier version of this study, Vawda and Patrinos (1998) record the following: "production economies would be maximised between production levels of 5 000 and 10 000 materials".

| | English/French/ Portuguese/ Spanish [E/F/P/S] only | Initial African language [AL] literacy + early- exit to E/F/P/S | Late-exit MTE, transition to E/F/P/S | Strong/additive bilingual: MTE + E/F/P/S to end of secondary | | |
|--|---|---|---|---|--|--|
| Orthographic development | None if E/F/P/S only used | Each language selected for use in education requires the development of an orthography. Many African languages have a long written tradition. Many others do not. The development of an orthography is not necessarily expensive, and can often be shared across borders. Community participation and work in organisations such as SIL and NAC | | | | |
| Terminology development | Use of E/F/P/S only – appears to be the cheapest option since the terminology is borrowed from Europe/northern contexts. | Initial readers in ALs; textbooks from year/grade 4 onwards all in E/F/P/S – minimal terminology development required, there- fore appears to be the second cheapest | African language textbooks to about year/ grade 6; then E/F/P/S only. Additional terminology across the cur- riculum required in the African language/s selected for the system | African language terminology developed to the end of secondary school – apparently the most expensive option | | |
| Translation | None required if materials originated in E/F/P/S are used. If learner centered materials, i.e. those originated in African society are used, then these must be translated into E/F/P/S. | Translation only required for early readers (see previous column) | Translation of all textbooks to year/grade 6. | Translation of texts to end of secondary. | | |
| Teacher salaries | Same costs | | | | | |
| Classrooms | Same costs | | | | | |
| Assessment instruments, administration | Same costs | | | | | |
| Assessment translation | | nstruments developed in language f teaching by teachers– no | | Only likely for secondary school- exit instruments | | |

Table 6.2 shows that many of the costs are the same across the different language models. The only differences occur in the areas of orthography development if there are no existing orthographies, terminology and translation. These together could be regarded as the costs required in the production of different language versions of textbooks.

In an exceptionally useful study, Vawda and Patrinos (1999) show that the additional costs are mainly in relation to possible teacher education and materials production costs. The table however, assumes that the EFA goal of quality education implies a general need for improved teacher education. Achieving quality requires additional teacher education costs anyway. It does not matter which language model is being implemented, teachers require further training in their subject area, the level/grade in which they specialise, and their own language and literacy proficiency. This is a reality that should not be ignored. A discussion of textbook provision and teacher education will follow in that sequence.

Cost-implications: textbook production in African languages

Patrinos and Velez (1995) and Vawda and Patrinos (1998 and 1999) have written a great deal about the costs of textbook production in indigenous languages in Guatemala, Senegal and the Gambia. The additional costs, as identified also by several other authors, are surprisingly lower than most of the second-language/international language lobby believes. In relation to the written use of African languages, including the necessary language tools for textbook production, the costs entail:

- 1. orthographic development (where necessary);
- 2. terminology development, or translated explanations of terminology, or a combination of both;
- 3. translation of textbooks (and school-exit assessment instruments where applicable); and
- 4. African language versions of textbooks.

So how expensive are these?

Orthographic development

Missionaries and other agencies have already developed extensive orthographies in many African languages, especially in former British colonies (e.g. Kenya, Malawi, Nigeria, Zambia and Zimbabwe) and in South Africa and Namibia during apartheid. Similar developments occurred in several languages of Guinea Conakry, and in Somalia in the late 1970s and 1980s. Amharic has long been used as a language of learning and during the 1990s extensive work has occurred in numerous (33) Ethiopian and several Eritrean languages. The work in Kiswahili is well known across the continent. Mali, Niger and Cameroon have made significant progress in the development of literacy in numerous community languages, which means that there are established orthographies. There are ongoing initiatives in Madagascar, Malawi³, Mozambique, Namibia and in many other countries. It also needs to be noted that many orthographies and scripts pre-date the colonial partition of Africa in the late 19th century, including several based on Arabic script, i.e. Ajami in West Africa. The situation is therefore far more promising than many people imagine.

However, where orthographic development is not well established, this will require an investment in resources and funds; thus additional costs. Yet by following the principle of identifying a selected number of priority languages (initially these will be larger regional languages with widest spread) and setting targets and time frames for beginning the developmental process, then later adding to this, as financial and other resources become available, it is possible without a massive initial input of resources and funds. In countries where there are few such resources, an option is to seek international aid to support processes which are driven by African scholars and community participation. There are several bilateral, multilateral and NGO agencies which recognise the need to support this work.

Research on orthographic development, for example in South and Central America, shows that if one plans the process well, it is less costly than assumed. It is important to ensure community participation in the work if the orthographies are to be acceptable and in order to avoid additional costs required by unnecessary revision and negotiation too late in the process. Another apparently successful initiative has been witnessed in Papua New Guinea where literacy materials in 380 languages were in production by 2000 (World Bank 2005). This would not have been possible if the costs were too high. Orthographic development, initially in 23 Ethiopian languages between 1994 and 2000 and in an additional 10 languages since then, has been most successful.

3 See, for example, the cross-border orthographic work of the Centre for Language Studies, University of Malawi in Zomba.

Terminology

During apartheid, the South African government set about further developing the orthographies of several South African and Namibian languages as part of its policy of separate development. Ethnolinguistic segregation in the schooling system was managed through unequal expenditure per learner: expenditure for 'white' learners far exceeded that for African learners. Yet orthographic and terminological development proceeded within this unequal and limited budget. For example, average expenditure per school pupil in 1974-5 was R39.53 for each African child, and R605 for each white child (SAIRR 1976: 321). Despite the enormous discrepancy in expenditure, the government budgeted for terminology development and publishers translated the textbooks for use in African education. If it had been too expensive, the government of the time would not have engaged in such activities. Terminology lists from the 1955-1975 period were assessed by language specialists of the Pan South African Language Board and the National Language Service of the Department of Arts and Culture in 2001. Although there is now a 25-year gap in terms of maintaining the terminology lists and keeping them up to date, they were found to be surprisingly acceptable and useful for school education some decades later. Recent translation of school-leaving examinations in science in Northern Sotho (Sesotho sa Leboa) funded by the Pan South African Language Board in 2000 was facilitated with approximately 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 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. Based on this, the estimated cost for developing sufficient terminology for use in nine South African languages and to cover: mathematics, science, biology, geography, history and economics to the end of secondary school is about US\$550,000. At least five South African languages are shared with neighbouring countries, Swaziland, Lesotho, Mozambique, Zimbabwe and Namibia. Thus investment in terminology, which is affordable in South Africa, could assist neighbouring countries and reduce the required investment. (See also discussion of terminology bank below.)

Translation

As mentioned earlier, between 1955 and 1975 education under apartheid necessitated translation and textbook production for the entire primary school curriculum (years 1-8). Initially it had been believed that textbooks

in African languages were "dumbed down". A comparison of textbooks from this era (Mahlalela-Thusi and Heugh, 2004) shows that, in fact, the textbooks were direct and complete translations. The content (including terminology and concepts) of educational material available in Afrikaans and English was developed also in seven South African languages and several Namibian languages during this time. The expenditure on African education was far less than that spent on the education of Afrikaans- and English-speaking students. The development costs (translation and terminology) were paid for by government. However, there were insufficient textbooks provided for African students (i.e. the government did not invest in large enough print-runs to supply each child with the necessary books). In other words, textbook printruns were not made using economies of scale, which would have reduced the per unit cost.

New developments in human language technology (HLT) and information technology in general are revolutionising the field of translation beyond Africa. The technology is such that it can be borrowed in Africa and adapted for use. The advantage of this (electronic) technology is that it reduces the time required for translation and therefore rapidly reduces translation costs. So it is effectively less expensive to translate school textbooks today than it was during the first phase of apartheid education (1955-1975) or during Sékou Touré's time in Guinea Conakry.

The related advantage of language technology is that it would be possible to build a generic electronic terminology bank⁴ to include core/essential educational terms for each of the subjects taught in African schools. Such a terminology or knowledge bank could be shared across regions, e.g. Southern Africa, East Africa, West Africa, the Horn, and so on. It has the possibility of being shared across the whole of sub-Saharan Africa, with regional or national supplementary features where needed or required. The biggest advantage to an electronic resource is its portability and capacity for rapid updating.

Even if the education/knowledge/terminology bank were to be originated in English, French or Portuguese, it has the facility of multiple parallel options. Therefore, if, for example, it were to be started in South Africa, a parallel one could be started in Senegal and the two could be merged, so that students in Senegal who speak Wolof might, out of curiosity, have a look to see what Zulu

4 The idea of an electronic National Terminology Bank has been on the drawing board in South Africa for several years. Progress has been disappointing for political rather than technical reasons.

speakers in South Africa call an eagle or a church or a mosque. The bank would have the facility to incorporate both international terminology necessary for science and be able to include indigenous knowledge terms.

Language practitioners in conjunction with HLT software (which is not expensive) could use the terminology/knowledge bank in combination with the translation software to begin the process of translating core textbooks into the priority languages for education in each country. The considerable overlap of languages and similarity between them would mean that through co-operative sharing of resources and expertise, the start-up costs of translation and training of translators would be dispersed and thus reduced for each country. For an in-depth discussion about the actual costs and some of the problems with importing this type of technology into Africa, especially as it relates to the production of textbooks and translation in many African languages, see Chapter 8.

African language versions of textbooks

Vawda and Patrinos (1999) have demonstrated that the publication of educational materials in African languages does cost more, but not nearly as much as is usually argued; but it is dependent on utilising economies of scale, which means there must be large print-runs or the costs would be excessive (see Chapter 8). Halaoui (2003), in another study, systematically debunks the usual arguments which suggest that textbook production in African languages will be more costly to provide. Together the implications of the Halaoui (2003) and Vawda and Patrinos (1999) studies are that, in most cases, the volume of textbooks 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. Vawda and Patrinos (1999), for example, show that where there are print-runs of in excess of 15,000-20,000 books, the unit cost compares favourably with books produced in English, French, Portuguese and Spanish. Even print-runs of 5,000 to 10,000 are considered to be viable. Vawda and Patrinos further show that cross-border cooperation and sharing of costs will often make it possible to reduce costs further.

So, although there is an initial start-up development cost, this can often be shared and it becomes part of normal recurrent rather than additional costs over several years (owing to reprinting, the normal requirements of textbook provision, and so on). Although Vawda and Patrinos (1999) include an initial teacher education cost, as discussed above, they argue that this also becomes part of the regular recurrent costs over time. Once the new teacher education programme has been designed, tried and fully implemented, it is subject to the same evaluations and adaptations as any other teacher education programme. In total, Vawda and 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 per cent of the learning materials and teacher education budget. In South Africa an additional 10 per cent of the cost of materials and teacher education would amount to less than one per cent (closer to 0.7 - 0.8 per cent) of the entire budget; hence at most, we are looking at an additional one per cent of the whole education budget in this country.

In situations where there are very small language communities and hence print-runs which would not reach 15,000 (or even the 5,000-10,000 break-even print-run), alternative approaches can be used. Papua New Guinea, for instance, has published materials in hundreds of languages by using a basic 'shell book' format. As of 2000, the country was using 380 languages in schooling (World Bank, 2005).

Economic spin-offs of an African language industry for Africa

Thus far, the concentration has been on additional cost implications. There are medium- and long-term economic benefits of developing the language industry in African countries (see Chapter 8 for more discussion and views about this). Orthographic and terminology development and expertise in translation would breathe new life into tertiary education on the continent. It would reinvigorate departments of African languages and linguistics. It would demand postgraduate students equipped as language practitioners. It would open up new possibilities for employment. It would limit the dependence on international publishing houses, often based in Europe. The second-language industry is a significant contributor to the economies of Britain, the USA, France, Spain and Portugal. The language industry, albeit a largely English second-language industry, appropriated and domesticated in Australia over the last 15-20 years, has contributed significantly to that country's economy. There is every reason why a loosening of the dependence upon the foreign-owned, second-language textbook industry would bring economic benefits to Africa.

Initial investment in resourcing African languages for greater use in schools will not only improve the quality of education, it has the potential to reap economic rewards beyond the education sector. The Ethiopian example is particularly instructive at this point. The Federal Ministry of Education has decentralised education to 11 Regional Education Bureaux across the country. In nine of these, teams of language workers/applied linguists have developed terminologies in liaison with university-based linguists, and established regional and local publishing industries. This has resulted in building skills and expertise in the regions, providing employment, and ensuring local and regional participation at multiple levels of education. By 2010, however, this thriving industry may be jeopardised by a new policy to allow multinational publishers to supply school materials in Ethiopia.

Cost implications: improving quality through teacher education

If we return to the discussion of teacher education implications and further unpack what is necessary for different language education models we see that, in fact, the straight-for-second language/foreign language and early-exit models are not cheaper to resource, they are actually more expensive.

A close examination of the different literacy/language education models proposed for or in use in African countries and their implications for teacher education suggests that training costs will be nearly the same whether or not the curriculum uses mother tongue or official/national languages for instruction. The situation in most countries is such that teachers are not sufficiently well trained or prepared for the classroom. Curriculum changes are being implemented in many countries. These two realities mean that there need to be changes in the pre-service teacher training/education programmes and in the in-service teacher education programmes (if they exist); or that in-service teacher education programmes must be developed (if they do not exist). These provisions (expenses) are mandatory to ensure the successful implementation of the curriculum.

Even where new curriculum change is not being attempted, teachers remain largely under-prepared or under-qualified in the majority of schools in sub-Saharan Africa. The logical step, whether in relation to old or new curriculum implementation, is that most teachers should be given further training in Africa. In addition, it is clear that pre-service training programmes need to be overhauled, changed or adapted. Continued expenditure on dysfunctional systems is wasteful. Reinvigorated teacher education is a priority in order to meet the Education for All goals, especially in relation to quality.

Table 6.3 illustrates the necessary input to prepare teachers currently in the system to implement existing or new curriculum to meet the EFA goals. It shows this in relation to each of the different language models considered in this report. The table, therefore, focuses on in-service education. It should be

read in conjunction with (i.e. it follows) Table 6.2. Table 6.3 expands on three horizontal rows relating to teacher education in Table 6.2. Here what would be required to equip teachers to offer quality education is spelt out per language education model. In addition, if teachers do receive adequate further training (for those already in service) or a new teacher education curriculum for new teachers, the comparative education outcomes for students are provided in the last three rows below. Some models are likely to render a positive return on investment (in relation to student achievement) while other models are not likely to achieve a positive return. This means that such models are costly and inefficient. These outcomes arise from a combination of longitudinal studies conducted in the USA (Thomas and Collier 1997, 2002), South African system-wide studies (e.g. DOE 2005), and multi-country African studies (e.g. Mothibeli 2005). The implications for language education models in relation to student achievement are discussed in Chapter 2, and can be seen in Table 2.4 and Figure 2.1.

Table 6.3

Teacher education requirements per language education model related to expected student outcome

| L2/FL only | Early-exit | Late-exit | Strong/additive bilingual (AL + L2 as Mol) | AL/MT as Mol throughout + specialist L2 subject |
|---|---|--|--|--|
| 100% ⁵ teachers from years 1-12 re- quire upgrading of their profi- ciency in English/ French/Portu- guese/ Spanish. | years 4-12) require upgrading of | 50% of teachers (all who teach from years 7-12) require upgrading of proficiency in E/F/P/S | 50% of teachers (all who teach from years 7-12) require upgrading of proficiency in E/F/P/S | 15% of teachers (only the specialist teachers of the L2 as a subject) require upgrading of E/F/P/S proficiency |
| All teachers (100%): require L2 language & L2 literacy meth- odology across the curriculum in order to teach through the L2/FL adequately | All teachers: 25% require training in L1, 75% require training in L2 language & literacy method- ology across the curriculum | All teachers: 50% L1 & 50% L2 language and literacy method- ology across the curriculum | All teachers: 50% L1 & 50% L2 language and literacy method- ology across the curriculum | All teachers: 85% L1 & 15% L2 language and literacy method- ology across the curriculum |

5 These percentage figures are used to illustrate proportions. Obviously there will always be some competent and well-trained teachers in the system. But proportionately, 100% of those who are not proficient in the L2 will require in-service training, etc. The same principle applies to the rest of this table.

| L2/FL only Early-exit | Late-exit | Strong/additive bilingual (AL + L2 as Mol) | AL/MT as Mol throughout + specialist L2 subject |
|-----------------------|-----------|--|--|
|-----------------------|-----------|--|--|

100% teachers require content and curriculum upgrade training – cost the same across all models – cost is the same

If all teachers are adequately prepared to teach through one of the models above and via the curriculum necessary to best prepare teachers for each of these models, then the expected student outcomes per model are reflected below, according to each of the different models.

| m | ean ac | l student hieve- % in L2 ⁶ | Expected mean ac ment 30 in L2 | hieve- | Expected mean ach ment 50% | ieve- | Expected s mean achi ment 60% | ieve- | Expected mean acl ment 60 | nieve- |
|---|------------|---|---|--------------|----------------------------------|--------------|-------------------------------------|--------------|---------------------------------|--------------|
| | ost | Value ⁷ | Cost | Value | Cost | Value | Cost | Value | Cost | Value |
| | ghest | lowest | high | low | medium | good | medium | high | lowest | high |

L1 = First language FL = Foreign language AL = African language L2 = Second language E/F/P/S = English, French, Portuguese or Spanish MOI = Medium of instruction MT = Mother tongue

What this means is that the most costly model to implement is the one requiring an upgrading of teachers' own proficiency in the target language (L2/FL or international language of wider communication). Already, 200 hours of English language improvement for each primary school teacher in Ethiopia show that this is not sufficient and that teachers lose their English proficiency rapidly in a sociolinguistic context where English remains a foreign language (used fluently only by 0.3 per cent of the population). The most costly model is also the one which is least likely to achieve educational success for students – the mean score in the L2 for students in this model is only likely to be 20 per cent – which means that they will not be able to understand mathematics or science or any other part of the curriculum through this language. Despite an investment of 42 per cent of the teacher education budget on improving teachers' English language skills in Ethiopia from 2005, there has been no significant improvement in students' achievement in English as a subject and students overall achievement across the curriculum has decreased

⁶ Expected achievement as per the research discussed in earlier chapter (Heugh) Table 2.4.

⁷ Value is determined here by the projected achievement levels evident from the available research.

(Heugh *et al.*, 2010). Therefore any expenditure on such a model is highly inefficient, has very low returns on investment, and is hence very low value for a system.

Late-exit models are likely to render middling returns on investment, i.e. the mean score for students in the target language is expected to be about 50 per cent, which means that these students have a middling chance at understanding and working with the school curriculum in the target language after year/grade 6.

Additive bilingual models of education cost about the same as late-exit models and the return is likely to be better than that for late-exit models. That is, the mean student achievement is expected to be 60 per cent at the end of year 6-8 and this means that a higher proportion of students are sufficiently well-prepared to enrol in secondary education and proceed through secondary. Therefore the value derived from additive models is high. The least expensive model to implement and resource is the one which would be the last one, the one based mainly on the local or regional language, with high-level second language subject teaching. The value is likely to be highest in this model. However, it is acknowledged here that this model is not likely to find favour with most African governments at this time.

If the objective is a functioning well-planned education system, there will be implications for teacher training/education. If teacher education provision is planned to support a functioning system and then mapped out according to different language models, then it becomes obvious that the use of African language-late-exit and additive bilingual models (African language plus the international language of wider communication) are not more costly than English, French, Portuguese or Spanish dominant models.

- Teacher education requirements regarding curriculum studies, content knowledge and classroom methodologies incur the same or equal costs across all language models.
- It does not cost more to train teachers in Africa to teach through the languages they know and speak well. It does cost 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 where

the language has second language use in the wider society, but far longer where the language is seldom heard, spoken or visible in written text ⁸).

The notion that mother-tongue and bilingual education is too costly does not hold up when teacher education vis à vis the impact of the medium of instruction is considered. In particular, when assumptions are made that teachers currently in the system are competent in the language they are supposed to use for teaching it is the result of not realising or understanding that the teachers cannot perform the impossible and teach without adequate training. They cannot teach through languages in which they do not have the required level of academic literacy.

A frequently-cited argument concerning centralised teacher education provision is that it is difficult to train teachers through several different languages in the same institution. The default option is to provide training only in the foreign/ international language of wider communication. A recent World Bank newsletter offers some advice on this:

"...where there are many languages, formerly centralised approaches to teacher development and deployment will need to be modified. To address this challenge, countries can decentralize the recruitment of teacher candidates and pre- and in-service teacher training can also be managed regionally rather than centrally" (World Bank, 2005: [3]).

The decentralisation of teacher education and support should not be linked only to language education issues. The issue extends across every facet of teacher support. Centralised approaches to teacher education are not adequate. Teachers on the periphery are left without sufficient support. Other discussions about in-service teacher education and support recognise that there must be regional and local structures in place. These are more likely to improve the support for the pursuit of quality education and are pre-requisite conditions for successful curriculum implementation and monitoring. They would also provide

⁸ In South Africa, where English is a first language for about 8 per cent of people and a second language for at least 30 per cent of the population this would mean that about 280,000 of the 350,000 cohort of teachers would require up to 200 hours of in-service language proficiency tuition. This is a huge undertaking and costly. In Ethiopia, English is known by only 0.3 per cent of the population, and is a foreign language. Although 42 per cent of the teacher education budget was diverted towards upgrading teachers' skills in English through a 200-hour in-service programme from 2005 onwards, this has had little positive return on the investment. Since this time student achievement in English has remained constant but achievement across the curriculum, particularly in mathematics, has declined (Heugh *et al.*, 2010).

a better resource for the literacy and language development requirements of all teachers. To link decentralised teacher education or support only to the language and literacy issues would not be appropriate.

Finally, in a study on cost-effectiveness of mother-tongue education in Africa, Komarek (1998) argues that in-service teacher education and textbook production in African languages are cost-effective and efficient, as argued above. However, this is with the proviso that governments do not change policy mid-stream. In other words, in unstable political climates, initiatives supportive of mother-tongue-medium education do not show good returns on the investment. This is because there is often premature termination of mother-tongue-medium and bilingual education programmes (i.e. during the early start-up phase). This is where initial investment cost is anticipated and termination occurs before the return on the investment can occur. Such circumstances should not be used as arguments to deny the affordability of mother-tongue education.

Summary of the discussion thus far

The greater the reliance on a former colonial language, the more expensive it is to resource with adequately-trained teachers. In addition, we know from the international studies discussed earlier in this report that the greater the use of the international language of wider communication, the lower the expected level of achievement. Therefore, it is clear, that the greater the expenditure on the former colonial language in African education, the poorer the return on the investment.

At most, we have initial estimated costs of an increase of less than 10 per cent of the teacher education and materials production budget for education if we follow the calculations of Vawda and Patrinos (1999). However, if we consider the additional arguments presented above, this is likely to be less. If South Africa is used as an example, since less than 10 per cent of the entire education budget is spent on school materials and teacher education, this would mean approximately an additional one per cent for the whole budget, at most. Although this discussion points towards the benefits for a domestic and/or a regional language and publishing industry, the costs and benefits for students have not yet been explored. Such benefits are likely to outweigh any initial investment.

Simulated cost-benefit calculations for education of students

One of the few economists who specialises in language and the economy is François Grin. Grin has been involved in various costing exercises for the accommodation of multilingualism, for example in the European Union, Canada, New Zealand and South Africa. His work shows that the use of indigenous languages for education and administrative purposes is less costly than believed.

Grin (2005) provides a useful simulated tabular example of the relatively low costs of accommodating bilingual or multilingual language policies in general. He identifies the gap in studies which might show detailed costs and benefits of different language education models, for example:

"dominant language-medium, with or without teaching of other languages as subjects; minority [MTE] language-medium instruction; bilingual streams with some subjects taught through the medium of the dominant language, and other subjects through the medium of the minority or dominated language" (Grin. 2005: 17).

In the absence of studies which cost these scenarios, he develops an earlier model (Vaillancourt and Grin, 2000) to illustrate the argument.

"Under very general assumptions, it can be shown that language of wider communication (LWC) education will generally be less expensive than MT education with respect to certain components of cost, such as necessary language standardisation and the production of educational materials. The actual activity of teaching and training would by and large cost the same, irrespective of the language in which it takes place; this latter result extends to teacher training.⁹ On balance, the analytical breakdown of items of expenditure leads us to expect MT education to be slightly more expensive than LWC education, in line with the finding,

^{9 &}quot;Training MT teachers may carry a higher cost if all teacher training occurs through [international] LWC, and only future MT teachers require additional training in order to be able to teach through the MT. This would then raise the question of the grounds on which the LWC is the medium of teacher training for all, and illustrate the frequent fact that seemingly higher costs for MT or minority language education are not a technical inevitability, but merely the result of some (eminently political) institutional arrangement" (Grin 2005: 20).

mentioned earlier, that moving from a unilingual (LWC) to a bilingual (LWC + MT) education system carries an extra cost in the 4% to 5% range. At the same time, MT will have an edge over LWC as a LOLT [language of learning and teaching] with respect [to] educational outcomes, usually in the form of higher test scores, less repetition of grades and lower drop-out rates. Another implication of using the MT as LOLT, since it points to an overall increase in the number of years of schooling that students undergo, is that they will accumulate a higher stock of human capital. To the extent that human capital, is a predictor of labour productivity, and hence of earnings, developing an MT educational stream will eventually result in higher earnings" (Grin, 2005: 20-21).

Using simulated analysis, Grin (2005) demonstrates the likely implications in relation to cost over a five-year period of primary education.

Table 6.4 Simulated cost effects of repetition and drop-out with LWC Education for All students (Grin, 2005: 22)

| Year | Cumulative drop-out rate | Average cost ¹⁰ | | | |
|--------------------------------|--------------------------|----------------------------|--|--|--|
| 1st | 0 | 100 | | | |
| 2nd | 0 | 100 | | | |
| 2nd repeated | О | 100 | | | |
| 3rd | 5 | 95 | | | |
| 4th | 10 | 90 | | | |
| 4th repeated | 15 | 85 | | | |
| 5th | 15 | 85 | | | |
| Cost of graduating student 655 | | | | | |

10 Simulated figure, not related to a particular currency. 100 denotes the total cost for 100 per cent of students in the system in the first year. If 5 per cent of students drop out of school in the third year, then it will cost 95 units to retain 95 per cent of students in that year, and so on. It has been shown that most students will need to repeat one or two years of primary if they are retained to the end of primary school, in early-exit or foreign/second language models of education.

Table 6.5

| Cost effects of repetition and drop-out with mother-tongue education for |
|--|
| mother tongue students (Grin, 2005: 22) |

| Year | Cumulative | Average cost | Average cost with |
|-----------------|---------------|--------------|-------------------|
| | drop-out rate | | 7.5% rise |
| 1st | 0 | 100 | 107.5 |
| 2nd | 0 | 100 | 107.5 |
| 2nd repeated | 0 | 100 | 107.5 |
| 3rd | 0 | 100 | 107.5 |
| 4th | 5 | 95 | 102.1 |
| 4th repeated | n.a. | n.a. | n.a. |
| 5th | 10 | 90 | 96.7 |
| Cost of graduat | ing student | 585 | 628.8 |

It needs to be emphasised that these tables represent simulated estimates. In reality, we expect there to be repetition and drop-outs from as early as year/grade one in many cases. These tables illustrate that the overall cost of educating a child using the mother tongue is likely to be less in the medium term, because mother-tongue-medium education reduces repeater and dropout incidence. Even if mother-tongue-medium education were to incur an additional 7.5 per cent outlay, as provided for in these tables (Grin's argument is that it is more likely to be in the four to five per cent range; and the earlier discussion in this chapter suggests an even lower additional outlay of about one per cent), the accumulated cost of retaining a child in school to the end of the fifth year/grade in a mother-tongue-medium education bilingual programme is less than it would be in a language of wider communication programme (628.8 vs. 655). Thus, there is a saving of actual financial outlay to the system, plus longer-term benefits.

A World Bank study in Mali showed that although French-only programmes cost less per year to resource, the higher repetition and drop-out rates made them more expensive than the mother- tongue/bilingual programmes during the primary phase: "...French-only programmes cost about 8% less per year than mothertongue schooling, but the total cost of educating a student through the six-year primary cycle is about 27% more, largely because of the difference in repetition and drop-out rates. Similar results have been found in Guatemala" (World Bank, 2005).

The study referred to above concludes thus:

"Bilingual education in Guatemala is an efficient public investment. This is confirmed by a crude cost-benefit exercise. A shift to bilingual education in Guatemala would result in considerable cost savings as a result of reduced repetition.... The cost savings due to bilingual education, even allowing for its higher cost, is estimated at over ... US\$5.6million in a year. A reduction in drop-out and its effect on personal earnings is estimated as an increase in individual yearly earnings of an average of ...US\$33.8" (Patrinos and Velez, 1995: 2, cited in Woodhall, 1998: 9).

The benefits of initial investment in African languages, in the long-term, with enhanced opportunities of formal employment and higher taxation, would result in returns to the national treasury in the form of taxation. There are other social, development and educational benefits to the national system, where students stay in school for longer. One of the key findings of research in relation to health, and specifically HIV/AIDS, is that the longer girls/women are in school, the lower the incidence of HIV/AIDS and other health-related problems. This would in turn have positive benefits to the economy. The most obvious benefits relate to lower health care costs, higher potential earnings, and increased parental support for the next generation of schoolchildren.

The arguments that cost prevents mother-tongue education are not based on empirical evidence. Detractors usually demand hard evidence of the lower cost of functioning mother-tongue education programmes, yet they do not recognise the need to produce similar hard evidence of the real medium- to long-term costs of early-exit education systems which, as shown in this study, fail the majority of learners.

Smart cost-reduction strategies for resourcing African languages in education

For too long, African countries, for all sorts of reasons relating to the residual effects of colonialism and the condition of new post-colonial elites, have placed too much reliance on expertise, material resources and education programmes designed in the north and west. By pooling the indigenous resources of the continent, and maximising existing knowledge and expertise, costs which relate to the further development of African languages, textbook production, teacher education and language education models for African countries can be minimised. It is no longer necessary to call upon and rely unduly on expensive expertise from beyond the continent. Our own experiences already provide us with the knowledge to design more appropriate models and approaches from beyond Africa, but we do need to reposition the expertise we have in much smarter ways.

Implications for teacher education and smart use of programme design

UNESCO's Education for All and the Millennium Development Goals, in addition to many other initiatives, have already prioritised the need to upgrade teacher education and to provide in-service or continuing education for teachers in Africa. There are significant numbers of teachers who simply have no training or are inadequately trained to administer any educational model with success. Mazrui (2002) suggests, as part of a five-point plan for educational transformation in Africa, that there should be far greater cooperation and sharing of expertise within the continent.

Most African countries have been involved in some form of curriculum transformation since Jomtien, and new revised teacher education programmes are necessary. These obviously require that the trainers are themselves adequately acquainted with new knowledge and expertise. There is furthermore much to be learned and shared among countries on this continent, and this is necessary if some of the difficulties and mistakes identified above are to be avoided in future.

Since there has to be initial investment in new teacher education programmes to put new curricula in place, programmes which include requirements for bilingual pedagogy and language acquisition are unlikely to incur additional costs at the inception stage when compared with other programmes designed to prepare teachers for curriculum changes. Once they have been designed and trialed, their maintenance becomes part of normal recurrent costs, as Vawda and Patrinos (1999) and Grin (2005) argue.

The international literature has already provided substantial data on teacher education needs for bilingual education models. This data, together with evidence from research as well as teacher education programmes designed to support mother-tongue education, and the learning of national and international languages of wider communication, must be shared and disseminated more effectively across the continent. The Project for the Study of Alternative Education (PRAESA), for example, has been involved in the in-service training of teachers to teach in bilingual/multilingual contexts through the University of Cape Town since 1998. It also initiated a programme, Training of Trainers for Multilingual Education, in 2002, as a strategy to pilot a programme which might be adapted for use across the region. The purpose of the training of trainers' programme is to equip teacher educators and language education policy and planning officials with the information they require to take the decisions which will best accommodate the language learning and educational needs of students in their respective African country. This is in line with the 1997 SADC Protocol on Education (SADC, 1997), which prioritised teacher education and a sharing of expertise or collaboration within the region. Lessons learned from initiatives such as these can be noted and programmes can be adapted, with little or no design cost implications, elsewhere on the continent. This does not mean that one country is advised to adopt programmes designed in another. Rather, the emphasis is on sharing and learning from each other's expertise, and making better-informed decisions which can speed up processes, cut costs and make most efficient use of the available expertise on the continent.

Cost-effective teacher education, training of teacher educators and criteria for advisors

The continent has already spent vast sums of money on programmes that do not serve learners well. This expenditure has been largely wasted. One way to ensure that expenditure is more appropriately targeted towards programmes which are more likely to succeed would be to have a series of checklists for teacher education programmes, training of teacher educators and expertise required of advisors to government departments.

Teacher education

Experience gained from teacher-trainer and teacher education programmes mentioned above, together with the international experience of bilingual teacher education, show that in the interests of efficient use of expenditure, teacher-education programmes need to take into account the following considerations:

- Teachers have not been trained to recognise the difference between the teaching and learning of a language and the use of a language as a medium of instruction for content subjects.
- The use of local/indigenous languages as mediums of instruction is not addressed directly it is assumed that if a teacher speaks a language she can teach through this language.
- Teachers are often expected to teach through their second language or even a language that is foreign to them and which is not adequately addressed in the training programmes. The result is poor communication/language modeling.
- Teachers end up code-switching as an act of desperation so it is not usually systematic. It is not a validated activity – so teachers and students are often obliged to disguise this activity as if it were not legitimate. In fact, it may be beneficial where it is used systematically. However, this issue needs to be properly addressed in teacher education programmes (see Chapter 3).
- Students reaching tertiary institutions often have to engage in remedial language programmes, English, French or Portuguese for academic development.

The curriculum for teacher education programmes in Africa should include:

- language proficiency modules for the teacher in both first language and second language (mother tongue and international language of wider communication), so that the teacher can provide appropriate instruction for the learners, and work efficiently with school texts;
- a basic introduction to first and second language acquisition theory, including how children become literate and effective readers and writers (applicable to teachers across the curriculum);
- teaching teachers how to teach reading and writing;¹¹

¹¹ I wish to acknowledge Hassana Alidou for this point. The significance of this point has become even more pertinent through later research in South Africa during 2007 when Alidou interviewed teacher educators and found that they were not teaching pre-service teachers how to teach reading and writing even within a new and highly expensive curriculum implementation in that country (cf. Reeves *et al.*, 2008).

- bilingual/multilingual teaching methodology and classroom strategies (including how to teach in and through African languages);
- use of and introduction to the process of developing of terminology in African languages;
- upgrading of content subject knowledge and expertise;
- introduction to and use of information technology;
- essentials of classroom materials production;
- classroom-based or action-research; and
- intercultural education.

(See also Dutcher, 2004a; Benson, 2010 for related discussions).

Training the trainers and informing the planners

In order to prepare educational planners/policy-makers to make the most informed decisions and teacher educators about changing responsibilities, it is feasible to act on Mazrui's suggestion for regional cooperation and offer joint programmes or programmes that include participants from several different countries. Experience from the PRAESA programme suggests that participants at this level would find the following course outline helpful.

- (Introduction to) First and second language acquisition theory, including how children become literate and effective readers and writers (applicable to planners across the curriculum);
- language education policy, models and outcomes;
- bilingual/multilingual teaching pedagogical principles;
- introduction to the process of developing of terminology in African languages;
- participatory (community involvement) approaches to education policy and planning;
- education planning advocacy; and
- cost-benefit approaches of medium- to long-term planning for educational success vs. short-term planning.

Pre-requisites for advisors to education authorities

Given the high-stakes consequences of commissioned advice to ministries of education, a set of minimum requirements in terms of the background experience and theoretical knowledge should be applied in the selection of consultants. In order to reduce unnecessary expenditure on approaches that are unlikely to yield positive returns, any education department or ministry seeking external advice regarding language education issues should insist that the advisors have adequately demonstrated expertise in each of the following fields:

- First and second language acquisition theory.
- Multilingual contexts in which the first language is/are African languages and are spoken by the majority.
- The international language of wider communication as the minority rather than majority language (as it inevitably is in Europe).

Requirements of language and or literacy programme evaluators

Many educators who take on evaluations of literacy and second-language programmes in Africa do not necessarily have sufficient expertise in literacy development and language acquisition. This is obvious from the plethora of evaluation studies that have not tracked students' performance to year five or six, which is the point where it becomes clear if the language programme has been successful and facilitated adequate learning for pupils. It is not advisable for donor organisations or other stakeholders to engage the services of education evaluators to provide adequate analysis of literacy and language programmes unless they demonstrate the necessary expertise. Literacy and language evaluators need to have adequate expertise and knowledge of the following:

- First- and second-language acquisition theory.
- Language education policy, models and outcomes.
- Current research on literacy and language learning in Africa and beyond.
- Bilingual/multilingual teaching pedagogical principles.
- Sensitivity to language development timeframes and how these impact on the need for longitudinally-based features of a programme.
- Adequate expertise in the construction of the instruments for evaluation (qualitative and quantitative).

Where evaluators do not meet these criteria, expenditure on evaluations or systemic assessments may be compromised or wasted.

A ten-point plan: activities required to make further use of African languages in education

| | WHAT | WHO | TIME | COST: same or more |
|----|--|--|--|---|
| 1. | Language education policy | Small consultative informed team: use experts from within Africa | 2 months – electronic local and regional consultations; 2-3 centralised 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 pub- lic media; formal and informal channels of communication | Start immediately; keep public up to date with the de- bates; 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 develop- ment | Speeds up time- frame for delivery | New costs but inexpensive, replicable, electronically accessible. |
| 5. | Translation tech- nology | University depart- ments 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 assess- ments, worksheets etc. | Inexpensive software investment. Time reduction = cost reduction. |
| 6. | Language devel- opment units | African universities – prepare students for orthographic, lexicographic, termi- nology and transla- tion development expertise | Start training as soon as possible (in the following academic year). | 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. uni- versity/ies; govern- ment department; non-profit indepen- dent structure) | On-going – long- term project | State investment/annual allocation. |

| | WHAT | who | TIME | COST: same or more |
|-----|---|---|---|--|
| 8. | Multilingual materials | a. Publishers – do- mestic; b. Specialist teachers can also produce these electronically. | a. Publishing time- frames require care- ful scheduling. b. Use of electronic education bank for storing teacher- generated materials is faster and can be used almost imme- diately | 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 train- ers; share available African expertise. | Fast-track capacity development, there- after timeframes same as for regular provision. | Minimal costs for initial design of new programmes, soon become normal recur- rent costs. |
| 10. | Total investment – additional expenditure on education budget for 5 years | | | 1%-5% ¹² recoverable and reduces overall expenditure over medium term (5 years). Medium- to long-term prog- nosis – economic benefits (return on investment and opening-up of increased em- ployment and local industry) for each country. |

Conclusion

Finally, inadequate economic theory allows governments to fall back on systems which show little return on their investment. What we know is that use of the current models of education, which do not make best use of the languages through which children and their teachers understand the world, means that we offer them education that is largely without meaning. Such education is not only expensive; it provides a low rate of positive return. The relatively small additional expenditure (current analysis indicates that this may vary between one and five per cent) for provision of education which makes greater use of local languages and provides better tuition of the international language will be recovered within five years through lower

12 Countries where orthographies and other language development units already exist can expect one per cent increase; where there are no orthographies, the costs could escalate to five per cent.

repetition rates. Teacher and administrator salaries represent the largest portion of the education budget and this cost remains the same whichever language model is used.¹³

Pai Obanya in a documentary film, *Sink or Swim* (Westcott, 2004), challenges us to consider the cost of not making the necessary investment in African language and extended bilingual education. What are the consequences of continuing to provide expensive education that does not teach students to learn? What are the consequences of ignorance in relation to health issues (especially HIV/AIDS), and the social impact of disgruntled youth?

We do know that for the economy, the longer students are in school, the higher will be the return on investment (Psacharopoulos and Patrinos 2002), the higher will be their potential earnings, and thus the higher the potential tax repayment to the state coffers (Grin, 2005). In other words, education is inextricably linked to improvements to a nation's human and economic capital. Education and development cannot be achieved apart from one another.

Recommendations

- a. Cost the budgetary implications of the different options over five to 10 years (i.e. initial additional costs, recurrent costs, cost recovery, return on investment).
- b. Ensure that the economists have the necessary information regarding literacy and language development issues in education.
- c. Develop a ten-point language education plan for each African country.
- d. Adjust the education budget and identify domestic and international sources for initial investment.

¹³ It is unlikely that the additional costs would reach five per cent even initially. The biggest cost in South African education is salary costs. Only seven to eight per cent is spent on teacher education and learning materials.

- e. Engage civil society in the social, educational and economic costs and benefits of different language and education models.
- f. Engage in bilateral or multilateral cooperative arrangements with other African countries.
- g. Contain costs: maximise the use of available expertise in Africa on African language and literacy development.
- h. Plan to recover costs and reap benefits from 2010-2015 onwards within three to five years from the onset of investment.

Chapter 7

Publications in African languages and the development of bilingual education

Yaya Satina Diallo

The development of African educational systems has reached a decisive turning point, characterised by the need to link the languages being used with the cultures they are supposed to serve. This explains why many countries have been formulating educational strategies based on bilingualism, which is expected to facilitate the reconciliation of the major interests of the learners with the need to be more open to the rest of the world.

The aim of the global initiative Education for All (EFA) is to develop educated societies. This cannot be achieved if "the majority of people, with all their diversity, are unable to obtain written documents and/or acquire the reading habit during their lifetime" (APNET/InWEnt, 2004).

Despite efforts in popular literacy training during the last decades, books and other printed materials in African languages are rare. Hence, access to reading materials for the vast majority of readers is mainly limited to bilingual schools and literacy training centers. This situation has a lasting impact on the supply line for educational books and other reading materials for the population at large, especially in African languages, printed by national or regional publishers to support a good quality Education for All policy (APNET/InWEnt, 2004).

The choice of language or the language of instruction is one of the fundamental criteria used to define the quality of education, and is correlated with the

learner's language and the availability of learning materials. It is equally true that manuals and other reading material in African languages can and should play a decisive role in the development of Education for All, since they underpin the basis of the organisation of school learning.

African countries are looking for appropriate, sustainable strategies to use African languages as languages of instruction in schools, together with the official international languages, bearing in mind the national situation and the evolution of the global culture. Research and experiences in several countries have confirmed the importance of the use of African languages to a child's pace and competence of intellectual development. This search for solutions could be supported by populations with linguistic diversity since they are aware of the need to preserve their own languages and cultural traditions and values.

Because of this situation, it is essential to define appropriate, sustainable strategies using realistic policies and programmes that have popular support and meet national requirements for mother-tongue education.

This chapter is similar to the others in the book as it demonstrates the need for a viable, literate environment to support efforts by governments, communities and partners-in-development to use African languages successfully and constructively as tools of education and training alongside foreign languages. The focus, however, is on publishing in African languages. Publishers have a vital role to play since they are key actors in the "book chain".¹

The role of book editors and publishers is well described by Hassana Alidou (2004) who notes that the development of good quality bilingual education in Africa requires: (i) the production of good quality books (textbooks, guidebooks, reference documents, novels, stories, and so on) in African languages and official languages, and (ii) culture-based development of reading and writing in national languages and official languages.

¹ The term "book chain" is similar to the economic term "supply chain", which refers to the system of organisations, people, technology, activities, information and resources involved in moving a product or service from supplier to customer. "Book chain", however, refers here to the usual supply chain, but also the "viable commercial activities in publishing, printing, distribution and booksell-ing as well as concerns such as issues of professionalism, freedom of expression, legislation and policies, the availability of library services, education and training, and many others" (Stringer, 2002).

Contributions by this sector to the creation of a literate environment

Furthering a literate environment, especially in African languages, is essential in achieving the inclusion of school education and literacy training in a country's cultural development (see also Chapters 1 and 5). It is primarily up to editors/publishers, writers and other African cultural actors to orient their output to the needs and realities of the targeted, grass-roots public.

In many countries, the few books produced in African languages are often published exclusively by the state via national literacy-training services and a few education-related NGOs. This is due to the large number of languages spoken by the populations, and the fact that they are used nearly exclusively to teach rural populations the reading and writing they need to solve their daily problems. These languages, however, should serve as vectors that enable access to the science and technology needed for sustainable social and economic development.

Since national African languages are rarely used as languages of instruction in schools, there is no real literature industry in these languages because the readership, which is small and geographically limited, is mainly composed of new literates, most of whom are people living in rural areas. In many countries, the introduction of these languages in the schools is usually part of an "experimental programme" (see Chapters 2 to 5 for in-depth discussions about languages used in African schools).

Sow (2003b) pointed out that lack of reliable statistics made it difficult, or even impossible, to give a clear picture of the publishing sector in African languages, with regard to both the global volume and economic value of production and the scope of the intrinsic production potential. Despite initiatives by ADEA, working with the African Publishers' Network (APNET), and especially the 2002 study on barriers to intra-African trade in books, obtaining statistical data in the book sectors is still a major challenge (Makotsi *et al.*, 2002). ADEA contacts will be helpful in rounding-out this first initiative by producing a database, updated annually by publishers, on the production and distribution of books in Africa.

Modern endogenous publications in African languages, in Africa, are still in a nascent stage mainly because the sector only started growing during the last

20 years, especially in the English-speaking countries. This is a sector that is seeking its bearings and future in a global context dominated by publications in Western languages which, especially in French-speaking countries, are the languages still officially used in the workplace and in schools (Sow, 2003b).

This situation cannot be dissociated from the global context, marked by slow change in the education and training sector – a sector that depends directly on the education, linguistic and cultural policies that, since the independence of the sub-Saharan African countries, are often timidly implemented. How else can we explain the fact that education in African languages is nearly always considered an experiment although the effect of learning in one's mother tongue on the quality of education is universally accepted?

Moreover, when these languages are introduced on an experimental basis or as complementary languages in schools, there is no continuity in the production of extensive educational materials and other printed support needed to develop reading. Guinea provides a typical example. School manuals have been published in the eight national languages that were selected to support scientific learning. But the production figures were far too low to meet needs, and the materials have never been accompanied by teachers' manuals and other complementary educational materials. Hence, globally, the results did not live up to the political goals set by the government in the 1960s and 1970s.

During this period, out of the 276 titles listed, 90 manuscripts were prepared, and between 1968 and 1983, only 10 were printed (*Assessment of the Days of Study*, Conakry, April 1983). The situation is summarised in the following table:

| | No. of manuscripts needed | | | | | |
|----------------------------|---------------------------|-------------|----------|---------|--|--|
| Cycles | Textbooks | Manuscripts | Approved | Printed | | |
| 1st cycle (1st – 6th year) | 96 | 38 | 11 | 9 | | |
| 2nd cycle | | | | | | |
| 7 th year | 60 | 27 | - | 1 | | |
| 8th year | 60 | 25 | - | - | | |
| 9th year | 60 | - | - | - | | |
| Totals | 276 | 90 | 11 | 10 | | |

Table 7.1 Production of school manuals in Guinea, 1968- 1983 (Diallo *et al.*, 2005)

As an example of the low national publication figures in Guinea, *Édition Ganndal* published, on average, six books (readers, short stories, storybooks) a year between 2003 and 2005 in four national languages, namely, Pulaar, Maninka, Sosso and Kpele. These titles are listed in the publisher's catalogue together with the French titles, and are sold through the same marketing channels (bookstores and decentralised sales points). The market for this line of production is almost negligible.

Considering the low printing figures for this type of production (around 500 copies on average) and the low sales price, it is not logical to count on any commercial profitability. However, new literates greatly appreciate these books, whose formats meet universal publishing standards, because they take the reader out of the strictly literacy-training mode and allow them to enjoy everyday reading in books that have quality appeal.

To make school manuals and other reading and learning materials more readily available in African languages, publishers and certain specialised NGOs are playing an increasingly active role in producing teaching support materials for EFA programmes. This new dynamism draws its inspiration from the renewed interest in using African languages in schools, and funding is available for certain components of various basic EFA programmes.

African countries who have established institutional environments that encourage the development of national languages by incorporating them as educational supports are experiencing significant growth in the bookpublishing sector (design, production, publication, circulation/distribution). They are gradually developing skills, at the national level, in the production of teaching materials in African languages.

In most of these countries, publishing in African languages is an endogenous activity that provides literature for youth, school and university books, novels and other reading supports. This means that the public has access to a variety of reading and learning products in their own languages (e.g. in Senegal, Burkina Faso, Nigeria, Kenya, Tanzania, Mali and Mozambique, just to mention a few countries which are developing the use of national language in their bilingual education programmes).

To help attract the resident populations to development goals, on the one hand, and to provide readily-available reading materials, on the other hand, certain publishers and cultural NGOs in French-speaking West Africa distribute newspapers in national languages (e.g. *Jamana*, which is a cultural cooperative; *Soore*, an NGO in Burkina Faso; and *Editions Papyrus Afrique* in Senegal). The content of these newspapers is not limited to what is generally found in the "rural press". They have become genuine sources of information and education that deal mainly with everyday problems of the local population and broach a wide range of subjects such as health, agriculture, animal production, politics, environmental protection and the rights of women and children.

However, these newspapers are "victims" of the official status of the African languages in which they are published and the small readership. From the technical angle, they also suffer from the shortage of professional writers and, from the financial angle, from slow retransmission of revenue from sales. They usually survive thanks to subsidies from bi- and multi-lateral donor organisations. As concerns the commercial distribution of these newspapers in national languages, their fate is not significantly different from that of other types of publications the sales of which are limited for well-known reasons such as the lack of a reading habit, low purchasing power of the target public, reduction or even non-existence of a local distribution capacity and high illiteracy rates in rural areas.

Nonetheless, it is remarkable that despite an environment lacking in incentives, professionals are developing alternative, innovative strategies to improve relations between readers and reading goals in national languages. The ARED experience (see Chapter 5) with distribution in Senegal (Fagerberg-Diallo, 2001) has clearly demonstrated that the public was aware of and keen on books devoted to subjects that appeal to them and relate to their main centres of interest. The readers themselves submit requests for specific books to the publishers.

A certain momentum has been achieved in Senegal, where *Éditions Papyrus Afrique* has published a good quality monthly, *Lasli-Njëlbén*, regularly for about ten years, with limited resources, in two national languages, Pulaar and Wolof. It is distributed through bookstores and by sales teams at weekly markets in rural areas where they promote and sell the journal and other publications put out by *Éditions Papyrus Afrique*.

With hefty subsidies, religious organisations (mainly Christian) serve as a major source of publications in African languages: translations and excerpts from the Bible, various educational booklets and other forms of publications

that restore religious and local cultural values. In Ghana, for example, literacy activities are carried out in the various African languages, using texts from the Bible. The faithful thus learn, in their own languages, the messages contained in the Bible, which helps to satisfy their spiritual needs. The knowledge acquired also encourages the newly-literate to read and write in other contexts which relate more closely to their daily activities.

Certain African languages are transnational, sometimes even regional (see also Table 1.2 in Chapter 1), such as:

- Pular which is spoken in more than 16 countries of the continent: Benin, Burkina Faso, Cameroon, Chad, Gambia, Guinea, Guinea Bissau, Mali, Mauritania, Niger, Nigeria and Senegal – and contains numerous lexical variants used by the people who speak this language in these countries. The languages used, in fact, are either Pular or Fulfude.
- *Malinke*, a sub-regional language spoken in Burkina Faso, Côte d'Ivoire, Guinea, Liberia, Mali, Senegal and Sierra Leone
- Hausa, spoken in Cameroon, Niger, Nigeria

Unfortunately, the numerous variants and the borrowing of words amongst these African languages make it difficult to publish books which can be used by the populations of these countries. For example, the translation tentatively made in the African Visual Dictionary, DVA in Pular (in which the picture serves as a definition), adapted for use by these peoples, was not completed due to the dialectical and lexical variants existent in Guinea, Mali, Senegal and elsewhere. The populations of those countries, where this transnational language is spoken, cannot use books as a basis for reading unless they correspond to their own particular environment.

The experience acquired in the course of the first generation of sub-regional projects, MAPE/PEUL, was an example of linguistic cooperation the results of which benefited all the countries involved. With the harmonisation of the alphabets (national alphabet, harmonised Arabic alphabet, N'Ko alphabet), of these transnational languages, other forms of linguistic cooperation can be developed at a sub-regional level.

Although these various languages have one or more harmonised alphabets, there is neither a large-scale regional publisher nor a trans-state distribution

of material in African languages, apart from a few exhibitions at fairs organised in certain African countries.

Furthermore, costs of production and sales results are difficult to establish, especially as those who publish in national languages do not have the necessary high level of funds to publish and distribute African-language books transnationally. In addition, the use of languages for training is limited in the various countries concerned. For example, Mali has given African languages the status of teaching languages, thus furthering the publishing of books in African languages, taking as an example books published in the official language, which is French.

Also, no well-established network of distribution/circulation of books in African languages exists in the states which share this preoccupation. Even within countries, these circuits do not exist. Each actor possesses his/her own circuits of distribution/sales, quite cut off from the rest of the world, producing and selling alone.

Just as no inter-state distribution/circulation network exists, so is it also difficult to describe a system of book sales in African languages at the regional level, due not only to the way individuals work in isolation, but also to the conceptual differences in the various languages and, above all, because since independence, such languages have been used on an experimental basis in most of these countries.

This sub-sector of circulation/distribution of books in the official language used in teaching is weak both on a national and on a sub-regional scale. In each one of these countries, only one or two bookshops – often subsidiary companies of foreign bookstores – undertake sales. In Africa, there are only a few companies that deal with a more specialised distribution, even in the official language. In most countries, the state has the monopoly on distribution.

Within a transnational framework, research/action could be undertaken to identify the needs of the populations which, in the various countries, share the same languages (see also Chapters 3 to 5 and 8). The textbook publishers of each one of these countries could consider the results obtained in order to conceive and develop, for example, reading booklets that take into account the needs of the learners. In this way, production units can publish suitable material that will be easily sold on the market, as long as what is offered corresponds to demand.

In this way, the actors in the book chain of national languages of all these countries can exchange their points of view on new ideas, which generate initiatives and income, including the identification of learners' needs and the distribution/sales of books to the consumers. The need to integrate through co-production, co-publishing and the distribution of works in transnational languages would seem a necessary strategic option. The actors of the book chain should take this up in order to minimise production costs and to shorten the period that it takes to produce books and make them available to the public.

In every case, co-production or co-publishing in transnational languages has advantages, including:

- the harmonisation of concepts of the transnational languages with the perspective of enriching the various vocabularies of each country that shares languages; and
- cooperation between actors in the book chain of a particular country as well as those in other countries.

This means developing an integrated editorial policy for works in transnational languages through the implementation of joint production and distribution strategies. The actors of the book chain must undertake this in order to minimise production costs and to make books available more quickly.

Other than the advantages of more extended markets, a better financial basis and the availability of competent human resources, those in the book trade will be able to minimise the unit cost of their production through cooperation with others.

This can only be effective within the framework of the adoption of both a linguistic policy (offering a larger use of African languages in school, or as official languages, in the same way as an official foreign language is used) and a book policy, which defines the methods to be used in the endogenous development of the book trade. These two institutional frameworks form the basis of the creation and development of an environment in which people are well-read in African languages.

Many bi- and multi-lateral development cooperation organisations and several NGOs are greatly concerned with the question of access to education using African languages and the establishment of a literate environment in these languages. For example, the German Federal Ministry for Economic Cooperation and Development (BMZ) is among the leaders, with its major support and funding for the InWEnt programme which, for over a decade, has been providing training and production support programmes for manuals and other reading materials in African languages in seven Frenchspeaking countries of West and Central Africa, namely, Benin, Burkina Faso, Cameroon, Guinea, Mali, Niger and Senegal. This programme has contributed extensively to national capacity-building in designing (training for authors) and producing (training for editors and publication officers in NGOs) of books in national languages.

As part of inter-organisational initiatives to improve the productivity and quality of publications in African languages and to encourage the public to read in these languages, the African Publishers' Network (APNET), German cooperation through InWEnt, ADEA, the Francophone Inter-Governmental Agency (AIF) and the UNESCO Institute for Lifelong Learning in Hamburg organised a sub-regional meeting in November 2004 in Dakar on "*Les livres – un enjeu de l'Éducation pour tous. Quelle politique éditoriale pour les langues africaines*?" [Books – a challenge in Education for All. What publishing policy is needed for African languages?]. The results of this meeting encouraged the participating parties to devote more resources and attention to developing publications and reading in national languages.

However, it is not easy to demonstrate that books, of high technical quality with interesting content, can be published in national languages in Africa. Weak material and financial means, continued taxation of inputs needed to produce the books, narrow markets, and an encumbering socio-political context that makes it difficult for the NGOs, publishers and private distributors to do their jobs are some of the major obstacles plaguing the industry.

The use of computer-assisted publishing (CAP) and print-on-demand (POD) technologies should facilitate and improve the design and publishing, allowing for greater control of quality and lower production costs.

Last, the development of publications in African languages is held back by the insufficient use of one of the topmost fields of literary production, namely translations, either from African languages to European languages spoken in Africa or vice versa. Translations are extremely useful in diversifying and connecting reading materials to the realities of the world and in promoting African culture on other continents. A few attempts have been made to

translate works written in languages that have been mixed together with other languages and are used over a vast geographical area, such as Kiswahili and Hausa.

The role of politics in promoting languages

Since national policies on the use of African languages in formal education in many countries condone the expansion of bilingual education models, general orientations should be set out more clearly in educational and cultural policy, linguistic policy, commercial policy and promotion policy, and with regard to the protection of copyright in African languages, bearing in mind recent developments in the countries and the global environment (see also Chapter 1).

One of the weaknesses of these orientations is the lack of effective synergy between the current literacy training system and the education system in the formal schools, a fact that is criticised in literacy training policies. Nada Centres are a good example. These centres were "second chance schools" created in Guinea with the help of UNICEF and could easily have been used to establish an educational structure that would lead to a bilingual (French and national languages) educational system. This opportunity was missed because French was chosen to be the language of instruction in these centres (Diallo, 1999).

No further proof is needed to demonstrate the benefits of using the native language in the learning process from primary schools to the third level of formal education (see Chapters 2 to 5). Appropriate educational policies would have an immediate impact on training and would contribute to the local production of well- adapted publications at a reasonable cost because publishers and NGOs publishing in African languages have to abide by general policies that, as concerns language(s) of instruction and languages used at the workplace as well as tariff regulations, are decided upon by the public authorities.

It is clear that as long as publishers do not have access to the huge textbook markets, the number of books in these languages will not grow and development will not be sustainable (see also Chapters 6 and 8).

On a national book policy

The economic and political stakes of globalisation make the introduction of policies, strategies and mechanisms that encourage cultural convergence essential at national, sub-regional and regional levels, in order to create the right conditions for the emergence of a national book industry that encourages the involvement of all parties in the book chain. The strategic basis for this approach is constituted by national capacity-building to ensure the active, effective participation of national professionals in the publishing sector (authors, publishers, printers, bookstore keepers and librarians), and close collaboration with governmental services (ministers of education and/ or culture, economic affairs and finance, and others), civil society organisations and partners-in-development (MEPU-EC/USAID, 2000).

The demand for the reinforcement of capacity with regard to the creation of the necessary conditions to establish a national book trade is based on the national book policy as a factor of cultural development, of which some of the principal strategies and actions are:

- Making publishers, political decision-makers and development partners aware of the motivations for and advantages of designing and adopting national book policies.
- Defining indicators of the foundations, methodology and mechanisms needed to implement national book policies.
- The introduction, by governments, of regulations that exonerate books and inputs for their production from import duties.
- The commitment by states, professional organisations involved in producing books and technical/financial partners to support initiatives intended to introduce favourable publication policies in the countries. These policies must include production of school textbooks and be based on a participatory, consensual approach as a fundamental pillar.
- The definition of a linguistic policy for national or African languages that grants these languages the status of language of instruction and literacy training. It is also absolutely necessary to use various strategies in order to define linguistic policies, such as those that:
 - heighten the awareness of those who are taking political decisions;
 - mobilise the material, financial and human resources in the preparation and application of legal and institutional texts in this field;

- prepare a persuasive case so that education partners become involved;
- create awareness among the grass-roots populations of the need to support and respect the ethics of the policies, using various channels of communication (e.g. through the audio-visual medias, the press, posters and personal contact).

Useful immediate actions:

- To organise discussions on the role and the place of mother-tongue languages in the development of education and culture with intellectuals, researchers, writers, communicators, book-trade professionals, political decision-makers and other stakeholders who play an important role in influencing decision-making.
- To plan, draft and adopt a linguistic policy.
- Adopt laws on books, with specific inclusion of books in African languages.

Implementation of all these elements could lead to positive changes. These actions ensure a process which is transparent and accountable with clear separation of decision-making levels through the sharing of roles and responsibilities by the various partners in the book chain, especially between the public and the private sectors. This would lead to: (i) the development of local book suppliers, a difficult, long-term undertaking that would give countries national sovereignty over education and culture; (ii) ownership of the book industry by nationals, thus creating income-generating employment and the development of specific national expertise and (iii) acquisition of incompany financing for the book sector.

In time, the national book policy should be fully aligned with international legislation, and preferential terms should be granted to the importation of inputs for the book industry in order to lower the production costs of reading materials. The ultimate goal should be the adoption and implementation of a specific law on books that gives pride of place to the use of African languages in education as one way to develop a national culture (Askerud, 1998).

The effects of a book policy depend largely on the relevance and strength of coordination mechanisms established at national level. This explains why, ideally, coordination should be entrusted to an independent organisation whose sole activity is promoting books. Such an organisation would be instrumental in giving impetus to and regulating the book trade (Sow, Camara, Diallo, 2001).

In addition, the national policy on books should be based on pertinent objectives with a goal of creating the institutional, material and technical conditions to render books (written in any language) available and accessible to all levels of society. The means for achieving this goal include the development of a national book trade industry in African and official languages, covering the initial preparation, publishing, distribution/circulation as well as promotion of these reading materials available to the public.

Book policy objectives need to include specific factors such as

- making available and accessible books written both in African languages and in official foreign languages to all levels of the literate population;
- setting up a fund for publishing of books in African languages at national and sub-regional levels;
- facilitating access to bank credits for African-language book trade professionals in order to stimulate endogenous production and improve distribution/sales;
- applying tax and customs measures that are conducive to the development of the book chain (de-taxation on book imports and printers' inputs that are related to their production of books);
- applying and reinforcing a legal framework for the protection of copyright and related rights;
- supporting the training and the improvement of professionals throughout the whole of the African-language book chain (authors, publishers, printers, bookshops, librarians and others);
- promoting a network of public reading through the creation and the energising of public and school libraries, having at their disposal a collection of books available in African languages; and
- facilitating the setting-up and the functioning of a National Book Council and application of the principal international conventions, such as the "Florence Agreement" (United Nations, 1950), the "Nairobi Protocol" (United Nations, 1976), the "Geneva Convention" (UNESCO, 1952) and Berne Convention (1979) on Copyright (Sow, Camara, Diallo, 2001).

A viable national book policy is supported by various book development policies, development strategies in various sectors of the national economy, and the roles and responsibilities of various partners (i.e. public and private sectors, partners-in-development and the beneficiary populations).

Production of school textbooks in African languages: economic problems and stakes

Since schoolbooks constitute the only lasting source of funding (they account for 95 per cent of the book market in French-speaking Africa, for instance), opening this economic opportunity to African publishers would provide them with the means to strengthen their technological and financial weight and consolidate the basis for a genuinely local book industry. Publishers agree that the financial sustainability of their enterprises depends on schoolbooks and that the publication of general literary works is predicated on profits from schoolbooks.

Informative examples can be derived from recent experiences in producing school textbooks in national languages by private publishers in Kenya, Nigeria, Tanzania, Mali (support for "converging education"), Senegal and many other places where national publishers have won sizeable contracts with the state and other technical and financial partners who support educational initiatives in national languages.

Complementary reading materials, such as children's books and fictional materials such as novels, for example, should be well displayed in school libraries and reading corners in traditional and bilingual classes set up under the Education for All programmes. This unquestionably would provide new commercial opportunities for editors and NGOs who publish in national languages.

Yet it is obvious that regardless of the estimated economic, cultural and social importance of textbooks and other educational materials in African languages, nothing can be done until political decision-makers adopt the institutional measures required to ensure official recognition of the role and position of national languages as tools and supports, especially in basic education.

Some progress has been made, for example:

- taxes and duties on books were lowered in Mali, Burkina Faso, Ghana and Guinea;
- professional capacity has been improved, thanks to various training opportunities for editors/publishers offered by NGOs such as APNET, InWEnt and AIF;

- various national associations in the book trade (authors, editors/publishers, printers, bookstore keepers) have strengthened their intervention and coordination capacity; and
- several governments have shown their political will to formulate and adopt major national book policies.

Another noteworthy event in several countries has been the gradual introduction of mechanisms to decentralise the procurement and management of schoolbooks, thereby capitalising on the local manufacturing of educational materials. Decentralising the financial mobilisation and/or management process, and allowing local communities to play their role as catalysts of basic education, would easily solve the key question of which textbooks and other publications should be recommended to the schools, and would mean that national sources of production would be used more systematically.

Decentralisation of procurement channels for schoolbooks and other reading materials would contribute to the creation of libraries and rural bookshops and the emergence of a society of readers. This would also give market access to national publishers and develop the capacity to produce African books, written by and for Africans.

Whatever be the case, as Sow (2003a) has noted, there are still major challenges that have to be resolved in order to overcome the many obstacles to the development of schoolbooks in African languages, especially:

• The lack of political will in many countries with regard to policies on language, books and reading.

In the majority of countries, ministries of education and culture show little political interest in working together to establish cultural and linguistic policies that (i) define goals relating to the development of a literate environment in national languages; (ii) give due attention to books published in these languages and (iii) promote readership.

• Heavy taxes and duties that penalise endogenous production.

High production costs in many countries can be traced especially tothe heavy import duties on the main inputs needed for publishing.And in the vast majority of countries, practically no aid is granted tonational publishing enterprises. The situation does not contributeto the production of books at prices that are within the reach of the

public at large and it tends to encourage the importation of finished products.

- Difficult access to bank credit for professionals in the book industry. Publishers usually have limited financial resources and, in most of the countries, it is difficult or even impossible for them to obtain bank credit. Lack of capital is also one of the reasons for the scarcity of projects for national language publications since the latter are not designed for a quick return on investment.
- Shrinking markets and non-existence of reliable distribution systems. The potential market for books in African languages is vast since many of these languages are spoken by a large number of people. But there are certain factors that reduce the size of the potential clientele considerably, especially the high illiteracy rate, the lack of a reading habit, low purchasing power and the absence of reliable distributions systems.

Conclusion and recommendations

The development of both an environment where people are well-read in African languages and of bilingual education must, of course, include publishing. However, the low level of revenues (thus of print runs), the scarcity of qualified personnel, the insufficiency of strategies to promote books in African languages, the absence of a linguistic policy, the low level of both literacy and purchasing power in the reading public (who are otherwise very isolated), the lack of a habit of reading, and the absence of books in African languages in the very rare libraries which exist in these countries, are the principal problems with regard to publishing in African languages.

In order to find a remedy for this, attention must be given to a certain number of basic principles required to create the right conditions for the emergence of a publishing sector that can provide effective support for bilingual education and literacy training, including the following:

- promotion of effective public-private sector partnerships, particularly as part of book policies that clearly set out national orientations regarding linguistic and educational choices;
- commitment by publishers to work with NGOs at national level in sharing resources and in publication projects to create a literate environment;
- sub-regional cooperation among publishers, by creating textbook series and other reading materials in the major languages of communications (e.g. Hausa, Pulaar, Mandingue and others) through co-publications, co-productions and co-distribution. This would also create enabling conditions for the production of books printed in large numbers at reduced production costs, and hence would mean that sales prices would be readily within the reach of targeted populations;
- protection of copyright and extension of laws in force, thus encouraging • respect for copyright laws and avoiding the discouragement that authors feel about creating literature in African languages. This is especially so since they are often perceived as mere exploiters of the oral tradition. Publications and popular works in African languages should be granted the same status as those written in the European languages used in Africa. Public awareness campaigns should be undertaken to promote authors' use of African languages in their writing and to improve public attitudes that consider writers who use these languages as "second class" authors, and the languages themselves as inferior. As it appears that most of the works produced (above all, by NGOs) have neither an ISBN nor copyright, extension and enforcement of copyright laws is important. Sometimes copyright is held by the ministry which is the author and the publisher. However, copyright and an ISBN obtained by a publisher guarantee copyright and related rights. The Geneva (UNESCO, 1952) and Berne (1979) Conventions were drawn up with regard to intellectual property in this spirit; and
- promotion of public reading and the reading habit. There are difficulties in organising and consolidating the public reading sub-sector, essentially because of the great dependence on foreign book suppliers and the weak developmental level of distribution and dissemination systems. It would be advisable that library procurement policies include a permanent item on book procurement and national languages.

The creation of an environment in which people are well-read is ensured by a number of indispensable strategies, which each country must not fail to take into consideration. It means that, among other things:

a. A synergy must be created between the actions of the various partners, including countries, the private sector, development partners, beneficiaries and other stakeholders.

The role and function of the state is to:

- adopt a law on books in African official foreign languages;
- train African-language book-trade professionals;
- define and implement measures which will help and encourage the development of the endogenous publication of books;
- pull itself out from the book production and distribution circuit as the project manager of policies and strategies for the creation and development of the national book trade;
- create and supply with financial resources a fund to help publication; and
- open the school book market to the national private sector.
- b. The private sector must produce and distribute books of quality, accessible to all categories of readers.
- c. Development partners must support the development of the national book trade.
- d. Communities must become mobilised to support the success of Education for All programmes in the formal as well as in the informal sector.

The path ahead is long and difficult, but there is room for hope. The production of books in national languages and their use in most of the countries has been improving significantly, despite linguistic policies that give little visibility to these languages and an economic situation that is far from favourable to the rapid take-off of local book industries (Sow, 2003a).

Chapter 8

Promise and pitfalls – a commercial view of publishing in African languages

Peter Reiner¹

The position of African languages has been the subject of much debate over the years, especially within the context of what is often referred to as the African Renaissance. Similarly, many have written and spoken at length about how African languages could and should contribute to the development of individual African countries and the betterment of the continent as a whole.

The purpose of this article is to contribute to this debate, not from an academic or purely theoretical point of view, but to provide inputs of a more practical nature based on the experiences of a company involved in Africanlanguage publishing for well over 25 years. Namibia is probably one of Africa's success stories when it comes to publishing in African languages, and one of a select few countries on the continent in which private-sector publishing of African languages is not only viable, but in fact profitable.

1 This article was presented at the Regional Conference and Expert Meeting on Bilingual Education and the Use of Local Languages, held from 3 to 5 August 2005 in Windhoek, Namibia.

The history of African-language publishing in Namibia

As is the case in most sub-Saharan countries, the Namibian peoples' culture was oral and the written word is a fairly recent introduction to the country. The first books to come to the country were brought in by travellers, traders and missionaries, and initially intended only for their own use.

The missionaries of the Rhenish Mission Society took the initiative in producing the first books for the local population. From the outset, though, they realised that if they were to get their message across, they would have to address people in a language the majority could actually understand. Thus, the first publication produced specifically for Namibia, in 1830, was in one of the Khoesan languages, Khoekhoegowab (Moritz, 1978a). As might be expected, the emphasis lay on material of a religious nature. But, giving people something to read serves little purpose if they cannot read, and a brief Khoekhoegowab vocabulary list was produced by the Rev. H.C. Knudsen in 1845, followed by an Otjiherero speller by the Rev. J. Rath in 1846 (Heese, undated: 197). Over the years, these initial attempts were gradually improved on and expanded to cover a wider range of languages, and the material thus produced was not only used in the training of new missionaries, but also featured in the education offered at the mission schools. The first book to be produced in the country itself appeared in 1855, but it would be 100 years before the Rhenish Mission Society actually established a printing works in the country. Another missionary society, the Finnish Mission, however, ventured into book production in northern Namibia in 1901 and today, known as ELCIN Press, it is the oldest existing publishing house in Namibia, publishing in four Namibian and two European languages.

Colonisation proper ushered in a new phase in the publishing industry. Official policy saw a dualising of education, with Germany as the colonial power providing schools, teachers and materials for the white settlers, while the education of the local population was left largely to the church. Largely, this development was mirrored by contemporary publishing trends. Books for settlers were imported largely from Germany, and when non-religious and non-educational publications started appearing locally around 1900, they focused on administrative issues and opening the territory for settlement. The churches, on the other hand, continued as they had been doing prior to German occupation, concentrating on religious and educational materials in various languages for their congregations. What Africans had to offer was considered an interesting field of study for the European ethnographer and anthropologist, but was not deemed worthy of recording on paper in its original, unadulterated form. When the first Namibian-published book by a black Namibian, Gottfried Tjiharine, did eventually appear in 1913, it was a volume of religious parables (Reiner, Hillebrecht, Katjavivi, 1994: 3-4).

World War I, occupation by South Africa and the Depression brought with them a virtual collapse of the country's publishing industry, and most private initiatives in this field closed their doors, leaving the authorities and the church as the only significant actors, albeit with the same focal points as before. This situation held until after World War II, when private publishers again began establishing themselves. Still, it was only the churches who published in the African languages, but their activities suffered a serious setback when, in 1958, all control over "native education" – and also the production of learning materials – was shifted to South Africa. Essentially, Namibia had lost all control over the education of children, be it in African or European languages (Cohen, 1994: 95-97, 112), and what was published locally in the African languages was material of a religious nature. In 1959, however, the Finnish Mission Press published *Omahodhi gaavali* by Hans Daniel Namuhuja, the first non-religious book by a black Namibian in an African language.

As paradoxical as it may sound, the gradual entrenchment of formal apartheid in the country led to a new phase of growth in African-language publishing. The emphasis on "own culture", "own education" and "separate identity", meant that language became a political tool, and that this tool needed to be developed. The Department of Bantu Education established a Bureau for Indigenous Languages in 1968, and the church-initiated Bureau of Literacy and Literature commenced publishing three years later, in 1971. Both produced mainly short textbooks and translations of Afrikaans titles to ensure that adequate teaching and learning materials were available to facilitate ethnic education. Thus, although the policy was based on ethnic divisions, it brought with it more active efforts in the development of local languages and contributed to expanding skills in local-language publishing (Reiner, Hillebrecht and Katjavivi, 1994: 12-13).

This situation prevailed until 1977, when the private publishing house Gamsberg Publishers was established by Herman van Wyk and Hans Viljoen; their first title, an Oshindonga reader, appeared in the course of the same year. The company gradually took over the publishing programme of the Bureau for Indigenous Languages, initially focusing on educational materials in African languages, but gradually expanding its list to include a wide range of subjects and languages. In the more than 25 years of its existence, Gamsberg Macmillan has produced some 1,800 titles in 23 languages.

A number of new actors emerged after independence in 1990, and the private sector was responsible for an estimated 95 per cent of the country's formal book production. Seven publishing houses were actively engaged in African-language publishing in Namibia during the heyday of locally-based publishing around 2000. Five, of which Gamsberg Macmillan is the largest, were private companies that produced mainly educational materials in the 12 languages recognised for educational purposes. The remaining two were church-based with their focus on religious materials. While various organs of the government and NGOs occasionally also produced information materials in the various local languages, the Ministry of Education's Directorate of Adult Basic Education (DABE) commenced producing a range of literacy training materials in several Namibian languages. Unfortunately, sluggish development in terms of the enabling environment, the absence of an unambiguous book policy, consistent cuts in the textbook budget (from N\$34 million to N\$21 million over a mere four years following independence) and considerable uncertainty regarding the future have impacted adversely on the small sector – during the first six months of 2005 alone, three significant publishing ventures and a bookshop have closed their doors.

Nevertheless, Namibia has a vibrant publishing industry, as can be seen from the *Namibian Books in Print* (Hillebrecht, 2004) with almost 3,000 entries for a population of a mere 1.8 million people. This means that the country's per capita book production surpasses even that of some traditional "reading" countries in Europe. More than one third of the titles listed are in African languages. Gamsberg Macmillan Publishers has a current backlist of just under 1,300 titles, of which almost 800 (over 60 per cent) are in African languages.

African languages' potential to contribute to development

Many will argue that since so few African-language publishing enterprises have turned out to be viable – let alone profitable – ventures, African-language publishing can hardly be expected to make any significant contribution to poverty alleviation and development in Africa. Yet, the Namibian example shows that there are exceptions to prove this generalisation unfounded, and that the role that African languages and African-language publishing could and should play in the development of the continent should be neither denied nor under-estimated.

Acquisition of knowledge through the mother tongue

The advantages of mother-tongue instruction have been the subject of numerous debates and publications, as discussed in previous chapters herein. In this regard, a Presidential Commission on Education, Culture and Training in Namibia commented that "... the most important single fact is that young children learn best in the language of the home and that conceptual development can be more reliable in the mother tongue" (Republic of Namibia, 2001: 109-110), and made a number of significant recommendations to ensure that this objective can be realised.

It is much easier to communicate knowledge in a language that the audience understands than in a foreign language. Furthermore, the situation in some African countries is such that the children are confronted with the official language for the first time when they come to school. This means that they need to learn a new language, and they need to learn subject matter in that language at the same time. If children, on the other hand, are afforded the opportunity to start their school careers in their mother tongues, they are more likely to have a sound basis on which they can then build their further education.

This is where publishers in the traditional sense have a crucial role to play. Whereas Western society has become unthinkable without computer technology, such technology will remain a dream for many Africans for quite some time to come given the inadequate infrastructure, electricity failures and the cost of the equipment itself. Radio and television, however, have made their way into many homes, but although they are important and generally affordable carriers of information, they have one disadvantage, namely that unlike print media they do not allow one to go back to something one did not quite understand or would like to see or hear again. In addition, these two media do not allow users to assimilate knowledge at their own pace.

Thus, the most practical way of storing and disseminating information in Africa at this stage is the written word. Since it has been shown that knowledge acquisition is much easier and quicker in one's mother tongue, there must be a place for African-language publishing on this continent.

Establishment of an industry and the creation of employment opportunities

Whenever a new enterprise is established, this automatically creates new avenues of employment. This also holds true for the publishing industry. It may be surprising for those unfamiliar with the publishing industry or book chain to learn just how many people and skills are needed to produce a single book. Once an author has submitted a manuscript, it needs to be evaluated, scanned or saved onto a disk (the majority of African-language manuscripts are received in handwritten or typewritten form), edited for content, language and style (which often cannot be done by the same person), proofread, illustrated, laid out or typeset for printing, then proofed again, printed, marketed, distributed and sold. Although the permanent staff complements of publishing companies tend to be small, people are drawn in on projects on a freelance basis, as their services are required, while a number of other industries and trades are required for various aspects (e.g. printing and bookselling). Regardless of whether the persons involved are remunerated by means of a regular salary or through royalties, fees paid for specific services rendered or profits on sales, publishing has the potential to provide sources of income for a considerable number of people in a wide range of fields and from a number of language backgrounds.

There are monetary benefits for the state as well, in that individuals earning money through their involvement in the publishing process (usually) pay income tax. Also, companies working within the formal economy pay taxes, and since the production and sale of books entail a chain in which several individuals and companies are involved, the process spreads the profits and thus also the taxes payable. A local publishing industry means that those taxes are paid locally, and not in a foreign country.

Local value-added possibilities and the retention of foreign currency

Apart from the employment-creation potential of any new enterprise and the resultant taxation accruing to the state, there are other direct and indirect financial factors, for example the possibilities of accruing the benefits of the value-added factors of production and distribution. A number of African countries export paper or paper pulp, while a considerable number of African

authors are published abroad – not that anyone wishes to deny them that international exposure. Therefore, when it comes to the finished product, African countries often re-import the writers, the books and the paper. To take advantage of value-added possibilities, it is desirable to control all of the factors of production and distribution of books, from the production of paper from pulp right through to the entire publication process (as discussed above).

This does not mean to say that there should be no imports at all. On the contrary, no country in the world can ever hope to produce all the books its readers require within the time required and in the languages required. In fact, the steady flow of knowledge through books and other published materials is essential if there is to be mutual understanding and development.

Yet the ability to produce more books locally will almost certainly result in considerable savings for any country, especially for those who import the bulk of their textbooks from abroad. Currencies such as the US dollar, the UK pound and the Euro, the currencies used for most imports to Africa, are steadily climbing against most African currencies, with the result that book imports place an ever-increasing burden on national budgets. If books were produced in Africa, they would not only be considerably cheaper and thus make more financial resources available for other areas of development, but would also save African countries considerable sums of foreign currency.

Independence from outside suppliers

There are three main reasons that independence from outside suppliers is desirable. First, a local publishing industry is more inclined and geared to catering for specific local requirements, and able to respond more quickly to changing needs. When countries are dependent on book imports, it is not always the case that they will find what they need when they need it. Publishers would rather increase their print runs, which would either enable them to reduce their selling prices and make their books more competitive, or increase their profits. Producing a country-specific adaptation essentially means a more expensive new edition, with all the pre-print costs involved – not that this always matters, since they, and not market forces, dictate the price.

Second, writing, editorial and illustrating staff based outside the country in which the books are to be used are not always entirely familiar with the specific conditions that may prevail in that country (the urban-rural dichotomy common to so many African countries is but one example), and the product supplied to African countries might not, therefore, be entirely suited for the purpose and the audience for which it is intended.

Third, foreign publishers are highly unlikely to produce African-language publications in any reasonable quantities. Those that do appear are usually published by universities and African Studies institutes and are aimed at the academic market, promoting specific interests. Although their importance should not be downplayed, they are often of only limited relevance to the majority of Africans and their development needs.

Dependence on outside suppliers means that African countries are faced with a "take it or leave it" situation when it comes to books. Although a strong local publishing capability cannot necessarily guarantee that books will always be available when and where they are needed at a price that is more affordable, it is almost certain that, with adequate training and commitment, African publishers will be able to produce relevant and appropriate materials in the languages required.

The practicalities of publishing in African languages

Publishing, like any other industry, does not operate within a vacuum, and this applies regardless of whether the industry is based in the private sector or government bodies. There will always be factors – political and economic – that determine the viability and success of an enterprise. Certain conditions will have to prevail to allow any economic activity to take root and grow, while there are also constraints that could affect the direction in which such activities develop. More often than not, these factors are beyond the control of any single actor, and it is therefore essential that all interested parties cooperate. As has been shown above, such cooperation is not only in the interest of individuals or companies, but also of the nation as a whole.

Prerequisites

Publishing in African languages merely for the sake of publishing in African languages will serve no purpose whatsoever, no matter how much local

or national and/or foreign funding is invested in such efforts. Rather, such publishing activities need to be based in an environment in which there is a purpose and a need for the industry's products, and where the sustainability of the industry can be guaranteed. In this regard, four key prerequisites need to be met: (i) an enabling environment, (ii) language development, (iii) communication channels and (iv) a free-market system and competition.

Enabling environment

The most important requirement for any industry to develop and remain functional is political stability, and this is probably truer for the publishing industry than many others – who will have money to spend on books in times of war or disaster? There also needs to be a market – what is the point of establishing and developing an industry if there is no need for its products? When it comes to African-language publishing, this need is felt more acutely than in other sectors of the industry, as any venture will only be successful in an environment in which there is adequate space and a definite need for published material in these languages.

Stability, however, should not be seen to mean only that peace should prevail in the country. Continuity and consistency in terms of government policy are equally important; the establishment of any industry requires time, and continuous disruptions because of policy changes discourage private-sector development. The publishing industry is especially sensitive to such policy changes, since the development of a school textbook, from concept to print, is a process that generally requires between two and three years. For example, in a company that has some 250 titles in progress, a sudden change in policy could mean that the millions of dollars in investment that this represents can never be recovered through sales. In addition, a significant portion of stocks held would become redundant as soon as the new policy takes effect, forcing the company to incur further losses. Ultimately, this could lead to the company's closure, which contributes to unemployment, loss of taxation to the state and loss of local capacity. A concomitant alternative could be that the investment lost could be recovered by increasing the prices of those books that remain relevant or those yet to be developed to comply with the new trends, thus making knowledge and information less affordable.

A country's language policy, for example, has a significant impact on the development and continued existence of a local publishing industry. The drafters of the Namibian Constitution (Republic of Namibia, 1990) considered the language issue to be so important that it is addressed in Article 3, immediately after the articles dealing with the country's sovereign territory and its national symbols. Although this article proclaims English to be the official language, it permits the use of any other language as the medium of instruction in schools if this does not happen at the expense of proficiency in the official language, and allows for legislation that permits the use of a language other than English for legislative, administrative and judicial purposes in regions where that language is spoken by a substantial component of the population.

Namibia's policies stand out as ones that create an enabling environment. The country's education policy reflects the objectives set out in the Constitution, while at the same time taking into account didactic considerations. The Ministry of Education recognises 13 languages, 10 of which are African languages, for educational purposes, with a status of a 14th (Portuguese) undetermined (Ministry of Basic Education, Sport and Culture, Namibia, 2003: 4). As far as is possible in a heterogeneous environment, children are taught in their mother tongue for the first three years of school. From year four onwards, English becomes the medium of instruction, while the various languages are offered as subjects, many up to year 12, which is the school-leaving year (Swarts, 1996: 15). Furthermore, the University of Namibia presents courses in several Namibian national languages, although there have been significant cutbacks in the African Languages Department in recent years. This policy ensures that there is a need – and therefore a market - for textbooks and prescribed works in African languages. At the same time, however, it places publishers under pressure: what is the point of teaching children to read their mother tongues if there is nothing for them to read? Further pressure is exerted on writers and publishers alike in that literature titles especially prescribed for the secondary years need to be replaced with new ones every few years. This should not be seen as an obstacle but as a challenge, and the result was an unprecedented growth in the country's body of national-language literature until about 2003, after which there has been a definite slump in the production of such titles.

Namibia has also taken active steps in promoting African languages when it comes to the media – not only by promoting them, but also by actually using them. Although there is only a handful of dedicated African-language newspapers, most newspapers either produce African-language supplements or feature articles in African languages. The country's public broadcaster, the Namibian Broadcasting Corporation (NBC), not only broadcasts in English, but also provides a number of language services, while the NBC's only television channel changed its policy from broadcasting news bulletins in English only and introduced news bulletins in the various national languages as well. All these factors contribute not only to creating an increased awareness of the value and capabilities of African languages, but also to encouraging more people to use African languages in a wider range of fields. This is turn positively affects the publishing industry in that there is a growing market for a wider range of titles, thereby increasing the likelihood that African-language publishing becomes a sustainable, viable – and profitable – industry.

One aspect of the enabling environment that is not yet in place in Namibia is a national book policy, and especially an unambiguous textbook policy. Since such an instrument governs a wide range of issues related to the book chain as a whole and should – at least in theory – also guide the interaction between the various stakeholders (producers, users and donors), the absence of such a policy is sorely felt by the publishing industry, as it would clearly define the parameters within which the industry would have to operate and allow some degree of certainty as regards future prospects.

Language development

It is difficult, if not impossible, to do a proper job without the right tools – the better the tools, the easier the job and the better the product. This holds true for the publishing industry as well. Unfortunately, many countries on the continent have neglected the most important tools in the trade of Africanlanguage publishing – African languages – in favour of the official languages, which more often than not are the languages of the former colonial powers.

This neglect is not a recent development. Although missionaries and academics – mainly linguists, ethnologists and anthropologists – made efforts to record and assist in the formalisation and development of African languages, their work was by no means selfless. For the missionaries, African languages were an essential tool in spreading their message, while for the academics they represented stepping-stones in furthering their professional careers. Largely, the colonial authorities did not give too much attention to the languages spoken in their colonies; rather they sought to ensure that the position of their own languages went unchallenged, and the bulk of published material was therefore brought in from home countries.

In most African countries, little changed in this regard after independence; those who came to power had gone through the colonial education system and were comparatively comfortable with the foreign language. A considerable number of countries receive virtually all their published materials from the former colonial power more than 30 years after independence, and this rarely includes materials in African languages.

For the majority of Africans, however, this represented a step backward. Science and technology have progressed in leaps and bounds and information technology has advanced at such a rapid rate that knowledge and information spread around the globe in a very short time. Africans, though, are left behind, not only because ICT is far less developed but also because information is generally available in foreign languages, while little is being done to ensure that African languages keep abreast of such developments in terms of terminology, thereby undermining their status as carriers of modern knowledge.

Most linguists will argue that language is dynamic and develops as the need arises. This holds true in a situation where the speakers of a language are confronted with new developments and need to deal with them in their mother tongue. Unfortunately, however, the technology that actually comes to Africa represents but a small portion of what is available, and the terms needed for it are therefore never created.

This not only widens the knowledge gap between the Western world and Africa, but also creates serious problems for publishers. Education systems throughout Africa aim to ensure that learners acquire the knowledge they need, not only to survive within their own contexts, but also to contribute to the development of their respective countries and regions. In order to achieve this objective, textbooks provided by publishers must provide the information and knowledge required to comply with the educational policies in the countries in which they operate. However, publishers cannot be the creators of the terminology needed to achieve both relevant and modern knowledge.

The process of word-creation is often slow due to differing generational educational capacities (i.e. the older generation may be less literate as well as less informed of new ideas, technologies and knowledge learned by younger generations in schools). There are also few linguists working in this field of endeavour (lexicography). In any event, if everybody coined new terminology at will, there would be chaos. This is evident in Namibia, where newspapers and the electronic media are frequently left to their own devices when it comes to covering recent developments in other parts of the world; newspapers and the language services of the Namibian Broadcasting Corporation often end up creating different terms for the same thing, leaving people confused

– and ignorant. There are no bodies which consistently and proactively create terminology, thus not only creating confusion, but also leading to a significant backlog of modern word creation in African languages. For instance, only three lexicographical works have appeared in Namibia since independence. Two of these, a Khoekhoegowab Dictionary (Haacke and Eiseb, 2002) and its abridged school version (Haacke and Eiseb, 1999) were developed mainly on the initiative of an academic, while the third, a bilingual compendium of subject glossaries in Thimbukushu and English (Legère and Munganda, 2004), is one of the outcomes of the GTZ-funded Upgrading African Languages Project.

Thus, there is the need for a concerted and centralised effort to develop African languages and to ensure the terms and words reflect the state-of-the world in knowledge and technology as well as the socio-cultural specifics where the language is used. This is where governments have a major role. In order for any organisation to be able to take decisions that carry weight, it will have to have government support. Only a centralised body will be able to ensure that efforts in language development are coordinated and that there is consistency. At the same time, however, organisations and bodies created for the purpose of language development should not be dictatorial in nature. Normal language development must be taken into account - terms created by the speakers themselves are more likely to find acceptance than those dictated from above - while consultation with other "language consumers" such as education ministries, publishers, the media and universities is essential to ensure not only that their needs are met, but also that they can contribute their experience and expertise to an effort which, ultimately, is in everybody's interest. The longer we hesitate in making serious efforts to reduce this deficit, the further most Africans will fall behind.

Communication channels

All too often, relations between the various links in the book chain, but especially between ministries of education and textbook publishers, are strained and reflect a certain degree of distrust. Ministries of education frequently view publishers – and especially private-sector publishers – as pirates trying to make profits at the expense of learners by charging exorbitant prices. Publishers, conversely, accuse ministries of education of not understanding the complexities and intricacies of the book production process. This accusation is not entirely unjustified, since many appear to be of the opinion that all that is involved in the production of a book is printing, with the printers doing all the work and the publishers making all the money.

In order to achieve meaningful cooperation and progress in the development of relevant and affordable materials, it is essential that this distrust be overcome and that the various stakeholders realise that they are partners responsible for different components in a process aiming to ensure an independent and sustainable education for our children.

Using the Namibian experience as an example once again, apart from the various trade associations such as the Association of Namibian Publishers and the Book Trade Association, Namibia has a multi-disciplinary body that aims to improve communication between those involved in the production, provision, purchase, distribution and use of school textbooks. Unfortunately, this body, the Textbook Liaison Committee, has advisory status only, and it is never quite certain whether concerns raised in the course of the discussions will actually be addressed. A major evaluation of the entire education sector has taken note of this need, and one of the proposals of the Education and Training Sector Improvement programme is the establishment of a Textbook Board on which representatives of various components of the book chain will be asked to serve and which will have a significantly wider range of powers.

The need for communication, and for communication channels to be put in place cannot be overemphasised. The publishing industry needs to be informed of policy decisions on time – there is no point in investing money in the development of short-run titles if the ministry has already made up its mind to acquire the materials elsewhere. Similarly, releasing final syllabi in July and expecting publishers to produce materials in time for implementation by the following January is a recipe for inferior products. The authorities need to convey their specific expectations, ambitions and concerns to publishers and allow for a process of consultation that will enable all parties concerned to work together in an effort to find a solution to problems.

Free-market system and competition

Many will query the advocacy of a free-market system and competition for a market that is allegedly so small. Both are, however, absolutely essential if one is to create an industry that is independent, self-sustaining and able to respond to market demands and pressures without being subjected to political considerations.

The Namibian situation is an excellent example to prove this point. The education authorities have not stopped at merely creating a market for African-language

publications through the education policy. Rather, the Ministry of Education defines policy and the National Institute for Educational Development (NIED) then develops curricula and syllabi to implement this policy. When it comes to producing the books required for teaching and learning the subject matter contained in the syllabi, however, the publishers take over; the state does not publish formal textbooks. This means that once a syllabus has been finalised and approved, it is released to all publishers. They, in turn, develop textbooks to comply with that syllabus, and submit them to NIED for evaluation. If the textbook is approved, it is entered in the textbook catalogue and schools are able to order it using the funds in their budget allocations. This system has several advantages.

There are several examples where more than one publisher has had a title approved for a specific year in a specific subject, which allows teachers to select the book which they consider to be the best in their particular circumstances or with which they are most comfortable. Second, there is, to some degree, a certain market for any approved textbook, which means that the publishers will, in all probability, be able not only to recover their investment and cover their overheads, but even generate profits that can then be used to develop more titles, which ultimately stimulates growth and encourages more actors to become involved. This cannot but be beneficial to creating and developing a literary culture, because one or two publishers cannot possibly cater for the entire range of interests of a nation's readers.

It is at this stage that the element of competition plays an increasingly significant role. Where several suppliers are vying for the same market, they will naturally attempt to secure as large a share of the market as possible. There are two ways of achieving this: the first is to produce a better book than the competitor does, while the second is beating the competitor's price. Ultimately, therefore, competition between publishers ensures that better books are available at more affordable prices.

Constraints

No matter how conducive the environment may be, African-language publishers will always be faced with certain obstacles. Some are purely technical problems and others of a human nature; some can be overcome easily if one is prepared to spend money, while others require changing people's perceptions over a prolonged period of time.

Perceived inferior status of African languages

One of the legacies of colonialism is that African languages are considered inferior by many African-language speakers. In the pre-colonial past, this may have been due to a subconscious misconception that if the foreigners had so many new and powerful inventions, their languages must surely be superior as well. During the colonial era this notion was reinforced by the fact that the authorities and their representatives used only the official – foreign – language and little attention was given to African languages, if any at all.

Unfortunately, this did not always change after independence; in fact, many African countries have adopted the language of the former colonial power as their official language, and political leaders frequently address audiences from their own language communities in a foreign language. This, combined with the fact that the development of African languages has often failed to keep up with other developments, especially in the fields of science and technology, has led many African-language speakers to consider their languages to be sufficient for day-to-day communication, but not suitable as carriers of modern knowledge and development. Many also believe that a qualification in an African language holds no economic prospects, as there are only limited job opportunities. To a certain extent, this is unfortunately reflected by reality; in many cases, the only avenues of employment for persons with such qualifications are teaching, interpreting and translation, the media and the publishing industry – where such an industry exists. In Namibia, and a number of other Southern African countries, a further factor plays a role that cannot be under-estimated, despite the political changes that have taken place during the past years. During the period of apartheid, the so-called Bantu Education for black people in African languages was used to exclude them from English, the language of the apartheid government, thus, African languages were a tool of oppression, and the resentment built up over many years persists (see also Chapter 2).

This is often witnessed during periods of education ministry budget cuts As a result of budget constraints, schools have to cut their textbook orders. Mathematics, English and the sciences are the last to feel the impact – the first to be dropped from the order list are the materials in African languages.

If any success is to be achieved with African-language publishing, these prejudices need to be overcome. Apart from the language-development aspects discussed above, it is essential to show to African-language speakers that their languages are publishable – it is impossible to develop a writing

culture if no reading culture exists. This is where publishers have a crucial role to play, and they need to be prepared to compromise if they are to achieve any success.

In Namibia, a number of approaches have been adopted to encourage people to read – and ultimately write – in their own languages. Publishers tend to be selective in what they publish, and a developing literary culture usually leaves little to choose from if one were to apply normal standards – some language communities produce no more than one manuscript every two or three years. Since, however, not publishing in African languages will only reinforce the notion that African languages are not worth publishing, publishers lower their standards somewhat and occasionally publish manuscripts that would have been rejected in normal circumstances. In addition, publishers sometimes launch competitions in order to obtain manuscripts from which a selection can then be made with a view to publishing. Thus, they provide people with materials to read in their own languages in the hope that it will encourage some to take up the pen and start writing themselves. Naturally, the editorial input required is considerably greater than in an established literary culture, but in helping authors to improve their manuscripts, some publishers are providing the readers with better examples on which they can then build. Gamsberg Macmillan Publishers (as noted earlier, the largest publishing house in Namibia), received texts in two languages, Oshindonga and Oshikwanyama, using a competition approach, which has been successful beyond all expectations; on average, they receive in excess of 50 unsolicited manuscripts for either of these languages every year, and are now in a position where they can be selective as to what is published.

Another, rather more subtle way of putting African-language publications on a par with those in European languages is the quality of their production. Frequently, publications in African languages are printed on paper of a lesser quality, with poor binding and inferior layout and illustrations. Although the reason for this is likely the desire to make African-language publications available in the first place and to make them available at affordable prices, it subconsciously reinforces the notion that African languages do not deserve as much quality as do European languages. For this reason, publishers will have to guard against making too many compromises in terms of material input, as the aesthetical aspect plays a more important role than is commonly understood.

Financial constraints

Like any other private-sector enterprise, publishers need to consider any project they undertake against the background of the potential returns on their investment if their venture is to be sustainable. At the same time, one needs to bear in mind that books cost money, and the price of a single book can represent a quarter of the monthly earnings of an average worker; a considerable number of bookshops simply do not stock African-language titles because they do not sell in sufficient quantities. There is no point in producing books that are predestined to lie in the store, unsold.

This is the vicious cycle publishers in African languages face: the smaller the print run, the higher the unit costs. Thus, the fewer copies of titles that are printed, the more expensive the individual copy becomes and they become affordable to fewer people. The table below, calculated for a publication of 128 pages in Namibia by Gamsberg Macmillan Publishers, will illustrate this point (please note that only selected cost factors have been included here; variables such as royalties, overheads, taxation and profit margins have not been taken into consideration).

Table 8.1Economy of scale demonstrated for a publication of 128 pages (in Namibiandollars)

| Copies | | 250 | 500 | 1,000 | 2,000 | 5,000 | 10,000 | 20,000 |
|-----------|----------------|--------|--------|--------|--------|--------|--------|---------|
| | Editing | 12,800 | 12,800 | 12,800 | 12,800 | 12,800 | 12,800 | 12,800 |
| Pre-press | Proofreading | 1,920 | 1,920 | 1,920 | 1,920 | 1,920 | 1,920 | 1,920 |
| | Illustration | 6,400 | 6,400 | 6,400 | 6,400 | 6,400 | 6400 | 6,400 |
| Pr | Layout | 7,680 | 7,680 | 7,680 | 7,680 | 7,680 | 7,680 | 7,680 |
| | Pre-press cost | 28,800 | 28,800 | 28,800 | 28,800 | 28,800 | 28,800 | 28,800 |
| | Origination | 605 | 605 | 605 | 605 | 605 | 605 | 605 |
| Printing | Printing | 3,045 | 3,199 | 3,379 | 3,945 | 5,765 | 8,154 | 13,440 |
| | Binding | 834 | 1,287 | 2,026 | 3,509 | 7,952 | 15,316 | 30,000 |
| | Paper | 1,067 | 1,659 | 2,838 | 5,201 | 12,285 | 23,570 | 46,615 |
| | Ink | 76 | 128 | 231 | 438 | 1,057 | 2,053 | 4,045 |
| | Plates | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 |
| | Printing cost | 6,627 | 7,878 | 10,079 | 14,698 | 28,664 | 50,698 | 95,705 |
| | Total cost | 35,427 | 36,678 | 38,879 | 43,498 | 57,464 | 79,498 | 124,505 |
| | Unit cost | 141.71 | 73.36 | 38.88 | 21.75 | 11.49 | 7.95 | 6.23 |

Table 8.1 illustrates that the economies of scale are significant for paper, binding and printing (in that order). It also demonstrates that the drop in costs (i.e. economies of scale) is noteworthy between 2,000 and 5,000 copies, and substantial in larger print runs – between 10,000 and 20,000. This is where the harsh reality of African-language publishing comes in: in many cases, the principle of economies of scale simply cannot be applied because the current market for African-language publications is so small. Harsh as it may sound, more often than not, dedicated African-language publishing makes no business sense.

This obstacle has been overcome in three ways in Namibia. Firstly, there is the principle of cross-subsidisation. Not one Namibian publishing house focuses solely on African-language publishing; rather, it is but one branch of the publishing programme. Gamsberg Macmillan, for example, produces textbooks for the various subjects in English, trade publications in several languages and African-language publications. Margins are calculated in such a way that part of the profits generated by the more lucrative fields such as English, mathematics and the natural and social sciences can be backinvested into the development of African-language materials to keep costs at an affordable level. Persistence in this regard has been rewarded, as some of the African language books published now not only pay for themselves but generate profits.

Cross-subsidisation takes place not only from the official language to African languages, but between African languages as well. The Namibian Ministry of Education recognises 13 languages for educational purposes, with the number of speakers ranging from some 400,000 for Oshindonga to a mere 6,000 for Setswana (National Planning Commission, Namibia, 1995), and publishers are obliged to produce textbooks for the first three school years in all 13 of these languages. The learner figures for the various languages vary considerably; in 2001 almost 17,000 year-three learners were taught in Oshindonga, while fewer than 200 received their tuition in Setswana (Ministry of Basic Education and Culture, Namibia 2002). If the materials developed for the various languages were costed individually, the cost of Oshindonga materials would be well below what is considered affordable, while the Setswana materials would be quite unaffordable. For this reason, such courses are costed as a whole, and the Setswana book ultimately costs as much as the Oshindonga book. Since there is no difference in the price of the books, teachers and parents are, therefore, more likely to choose the textbook in their mother tongue than they would be if price differences were to come into play.

The majority of African language publications in the country have been produced for the school market. Naturally, the focus falls on grammar texts and texts to teach reading, but literature in the various genres represents a significant portion of the annual output, as prescribed works feature prominently in the syllabi of the various languages taught. Rather than produce only the quantities required to fulfil the annual textbook orders of the Ministry of Education, Gamsberg Macmillan Publishers usually increases the print run somewhat. This reduces the overall unit cost, and means that the excess can be sold to the public at affordable prices.

Gamsberg Macmillan Publishers works somewhat differently than other publishers, preferring not to "waste" publications. Many publishers work on the principle that all books that remain unsold after a given period are either pulped or dumped on the market at throw-away prices, which means that a publication can be out of print within two to three years after its first appearance. New books are then produced at new prices. Rather, Gamsberg Macmillan keeps its publications in stock until they are actually sold, as this not only increases the life of a title, but also means that they can be sold at reasonable prices.

There are, of course, two "outside" options or interventions, namely government subsidies and donor funding. Although both these means of reducing the cost of books are always welcome, no commercial enterprise can rely solely on such sources of revenue. Government and donor priorities may change, which could bring the publishing activities to a virtual standstill. Rather, every attempt should be made to ensure that the industry is self-sustaining, with the external intervention stimulating growth and diversification.

The issue of donor support has proved to be a two-edged sword in many African countries. Different donor countries have different policies and criteria as to how and to whom donor aid is provided. Quite often, however, there is a rather undifferentiated approach to assistance, and there appears to be a tendency of "one solution works for all", which means that the aid provided – however well-intentioned it may be – is not necessarily what is needed in a given situation. The various aid policies, particularly of bilateral and multilateral donors, have been criticised extensively in recent years. Yet because of the many critiques, from both inside and outside the official development assistance community, donor practices are changing to take into account local, regional and local specificities. Some countries have not always thought the donor support on offer through to its logical conclusion before accepting the support, sacrificing their own long-term publishing independence and materials-production capacity in the interest of quick-fixes to real and pressing current problems. In situations where budgetary constraints mean that there is never enough money for textbooks, many a country will jump when a donor offers to develop and provide half a million textbooks in selected subjects. One can hardly blame them if they are faced with a situation in which five, six or even ten learners have to share a book. If the recipient country, however, has an emergent publishing industry, if the selected subject areas represent only the more lucrative segments of the textbook market, and if the local publishing industry has in fact already developed adequate materials in the subject areas concerned, such support means that both the financial and human investments made by the local industry could turn into huge losses overnight, especially if the development and production of the donor materials takes place in the donor country. The situation has the potential to become even more problematic if the local industry operates on the principle of cross-subsidisation – the prices of previously-subsidised materials would then either have to be a reflection of their actual cost, or such materials would simply have to disappear from the publishing programmes. In a worst-case scenario, a single project of this nature has the potential to destroy an emergent publishing industry in no time at all, resulting in a continuance of the dependence on outside suppliers.

It is obvious that the above scenario is far from ideal. Although it solves the immediate need for textbooks, it deprives the recipient country of the opportunity to develop the capacity to provide for its own needs. Donor projects should be structured in such a manner that the support works together with the local book chain in the recipient country, thereby stimulating all facets of the industry, and filling in the gaps where they exist. A case in point here is the GTZ-sponsored Upgrading African Languages Project, which in effect is a partnership between the Namibian Ministry of Education, German development agencies and private-sector publishers in Namibia. By far the greater majority of individuals, institutions and firms involved in the development of the materials are based in Namibia (or South Africa if these are not readily available locally).

Copyright

Copyright violations are a serious threat to the publishing industry on the African continent as a whole – on average, the Namibian publishing industry loses an estimated 15-20 per cent of its annual turnover to illegal photocopying. Although many African countries have enacted copyright legislation and are signatories to at least one of the international copyright or intellectual property conventions, very few actually take steps to enforce the instruments, and even fewer have copyright regulatory authorities or organisations to promote copyright or intellectual property understanding.

This creates a dual problem. In the first place, the publishing industry stands to lose substantial portions of its turnover if the issue is not addressed. There is a considerable number of smaller fields that publishers no longer consider viable, with the result that no books are available for them at all – there is no longer anything to even copy. Second, the situation has already arisen that good authors have refused to write textbooks because of copyright infringements; the royalties they stand to earn do not justify the effort they need to put into writing a book.

As a result, in order to be able to produce a book at all, publishers sometimes have to fall back on second- and even third-choice authors, which either necessitates a more intensive editorial input and thus increases the cost of books, or means that learners are left with inferior books if there is insufficient editorial input to compensate for the inferior author.

Non-standardised orthographies

Much has been done in terms of recording African languages and developing standard grammars and orthographies, and most African universities today offer courses in African languages, with an increase in locally-based research into these languages.

Yet it is especially the field of orthography in which Namibian publishers experience problems. In the first instance, not all languages' orthographies have been finalised and accepted. Over the years a number of linguists and missionaries have, for example, been working on Ju/'hoan, one of the minority San languages in the country. Unfortunately, they tended to adopt different systems and are only now beginning to reach agreement on a standardised orthography. Although several requests have been addressed to publishers to produce materials in this language, they are reluctant to do so, and understandably so, since Namibian publishers bear the risks. The first problem concerns typefaces. Typefaces presently available for computers do not cater for the specific current needs of Ju/'hoan. Thus, such a typeface would first need to be developed, and not knowing exactly what characters will ultimately be required could result in the exercise having to be repeated – at considerable cost – once an agreement has been reached. Secondly, since Ju/'hoan is such a small language group, the first print run for any publication in this language would necessarily represent stock for several years. If a publication were to be produced now and then turn out that a different orthographic system is adopted, publishers would have to pulp whatever stocks they hold, thus incurring losses.

A second problem lies in the fact that standardised orthographies are not always adhered to by publishers. A good example of this concerns one of the African languages spoken in Namibia, which is the victim of an academic debate as to whether the disjunctive or the conjunctive system should be used. This has led to the absurd situation that student teachers were taught one system at university, while the education system and teaching materials use the other.

A third problem regarding orthographies pertains to the cross-border languages. Essentially, Namibia shares three African languages with neighbouring countries (Oshikwanyama with Angola, Silozi with Zambia and Setswana with Botswana and South Africa), although there is some overlap for several other languages as well (Legère, 1998: 38). In normal circumstances, that would mean that Silozi publications produced in Namibia could be sold in Zambia and vice versa, thereby increasing the market. That, unfortunately, is not the case. Rather, Namibia has decided to adopt one orthography and Zambia another – for the same language – which means that if a Silozi book first published in Zambia is to be used in Namibia, the orthography must be adapted to comply with the Namibian conventions (Coates, 1996: 82). This results in a duplication of development costs, which makes books unnecessarily - if not prohibitively - expensive. It is, therefore, essential that the authorities of countries sharing languages reach agreement on standardised cross-border orthographies, as this will not only make more publications available to more people, but also make them available at a more affordable price because economies of scale can come into play.

Closely linked to the issue of non-standardised orthographies is that of what could be referred to as "artificial languages". There are known cases where variations with a mutual intelligibility of more than 90 per cent have, for political reasons, been classified as different languages, necessitating the development of separate textbooks. This would be taking mother-tongue instruction too far, and compromise economies of scale.

Shortage of trained personnel

As most African countries have a relatively short history of African-languages publishing and the publishing industry that does exist is relatively small, publishing companies usually have a limited pool of suitably trained personnel at their disposal. Virtually no training courses are offered on the continent in the field of publishing, and most persons currently involved in writing and publishing are therefore either self-trained or were trained on the job by the publishing houses employing them, or they were trained in other fields and have since ventured into publishing.

The shortage of trained personnel is notable in virtually all areas of publishing, but is most acutely felt in the field of writing. Since the range of books available in the various African languages is fairly limited, prospective authors have little to guide them, and this is reflected in the quality of the manuscripts received; given the fact that Namibia is only gradually beginning to develop an African-language reading culture, there is still a long way to go before an established writing culture can evolve.

In Namibia, a fair amount of work is being done to address this issue. The National Institute for Educational Development, through curriculum committees for the various African languages, regularly arranges meetings at which materials are developed. UNESCO's Basic Learning Materials Initiative presented courses for writers – and publishers – in a number of fields. Unfortunately this programme has been discontinued. GTZ was engaged in the Upgrading of African Languages Project aiming to improve the status of and provide basic learning materials for six Namibian languages (Khoekhoegowab, Otjiherero, Rukwangali, Rumanyo, Silozi and Thimbukushu), with occasional materials in other languages as well.

It is the publishing houses, however, that play the most important role when it comes to the practical aspects of author training. In some cases, publishers finance writers' workshops, or make available experts in certain fields to assist writers in developing materials. Since, however, such workshops tend to be more theoretical in nature, the bulk of assistance to authors tends to lie in the editorial input provided. This is even more effective in that the editor – or editors – can then focus on one person and one work at a time and provide guidance in all aspects of the manuscript. The editor goes through the entire publishing process – from manuscript evaluation to camera-ready copy – with the author. As a result, what the author learns has more immediate significance than a general lecture or workshop could provide. Although this is a time-

consuming process, the results are encouraging. The quality of the product that ultimately appears in print is of an acceptable standard and serves as a useful model against which budding writers can measure their own work and from which they can learn. Consequently, the quality of manuscripts received is steadily improving, which means that less editorial input is required, shortening the time it takes to produce a book, and thus reducing the costs. Another alternative in the setting of standards, namely the production of translations of foreign works into African languages, is a two-edged sword. Although this makes world literature available to African-language readers and provides African-language writers with something against which they can measure their own work, the quality of the translations more often than not cannot do justice to the original. Also, one needs to guard against not only spending too much time and money on translations at the expense of the development of an African written body of literature, but also against creating the impression that foreign works are necessarily better than those written by local authors.

The lack of trained editors with sufficient experience to work in Africanlanguage publications is another of the many problems faced by national and local publishing houses in Africa. The shortage of suitable editors leads to problems throughout the process, including errors caused by distinguishing differences between grammar and style issues and relying on the editor to act also as the proof-reader. To ensure quality, separate people should do these tasks, yet in practice, this is often not possible. Schooling to become an editor as well as training courses for editors of African languages are needed throughout the continent to improve publications and decrease the need to hire from the small cadre for tasks that should be separated.

Proofreading and the lack of trained proofreaders is equally problematic. Where a title in English usually goes through three to four sets of proofs at most, most African-language titles require at least double that number. Even then, it is not possible to be certain that the errors still contained in the publication are within acceptable limits. On occasion, readers who have marked several errors on virtually every page return printed copies, and what should have been a reprint that generates profits becomes a new edition that makes a loss. In extreme cases, entire editions must be withdrawn and replaced with corrected versions. To some extent, this may be ascribed to the fact that there have been changes to a number of orthographies in the not-too-distant past while others are currently being revised, which leaves many insecure. However, it is also due to the lack of professional proofreaders; relying on

those less qualified is a risk, especially when they are externally contracted, for they do not always realise the importance of this step in publications and hurry through the proofs in order to finish quickly and be paid.

Given these problems, there are publishing companies in Namibia who have opted for the easy way out and who have arranged for the bulk of the editorial work on their publications to be done by sister companies outside the country. Although this reduces the frustration involved in the publishing process and reduces costs, this is neither in the interest of the country nor in the interest of a local publishing industry. At Gamsberg Macmillan, every attempt is made to have an inexperienced editor work together with an experienced editor whenever the time and situation allow, even if the experienced editor does not speak the language concerned. As a result, one provides the editorial experience and thereby training, while the other provides the language skills and cultural background required to do justice to the manuscript.

Inadequate computer software

In today's world, computer technology has become an integral part of publishing. Where lead type was still in use until fairly recently, even the shooting of film from camera-ready copy has become an obsolete process in many parts of the world and disk-to-film and even disk-to-plate technology has taken its place, reducing the time required (and thereby cost) to prepare a publication for printing. Similarly, although computer programmes with spell-check features cannot ensure that a text does not contain spelling mistakes, they can help to eliminate a substantial number of errors even before proof-reading commences. This not only helps to prevent inconsistencies, but also means that fewer sets of proofs need to be read before the publication can go to print. The same applies for hyphenation modules, which make the task of the layout artist so much easier, as they allow optimal use of the space in a line, thereby improving the overall visual appearance of the final product.

However, available computer programmes (in 2005) – whether wordprocessing or desktop publishing applications – cater predominantly for European and some Asiatic languages. Spell-checking facilities and hyphenation modules – both tools that could contribute considerably to reducing the time required to complete a publication and to ensuring the quality of the final product – simply do not exist for African languages. When computers are used, all hyphenation has to be inserted manually, making errors a common occurrence. Since no spell-check facilities are available, the tedious process of proof-reading is prolonged. Problems also prevail as regards the typefaces available for computers, since they were developed for specific markets and languages, and those readily available do not provide the characters and diacritics required for African languages.

Fortunately, these problems are not insurmountable, although overcoming them will be costly. The easiest problem to solve is probably that of the typefaces. Until fairly recently, one required the services of a computer programmer to develop a new typeface that could be reduced, enlarged, emboldened and italicised. Today, however, there is an increasing number of software packages that allow the user to manipulate fonts and create new characters. When it comes to spell-check facilities, the issue is slightly more complex, in that a complete dictionary that contains all the forms of words needs to be created for a given language. This will prove a time-consuming and costly exercise, and may require certain computer applications to be customised to allow spell-checking in a language foreign to that application. More or less the same process will prove necessary for hyphenation modules in African languages.

Businesses must invest in the tools required for the trade. Some publishers have invested considerably in technologies that allow them to make optimal use of computers in the publishing of African languages. Nevertheless, although the software is theoretically available, this is not the case in practice. Price is one of the obstacles; others relate to software development practices with regard to competition. Any private enterprise will jealously guard every little advantage it holds over the competition. Thus, the software developed is rarely made available to users outside a particular company. When available it is both costly and usually subject to stringent conditions. This means those wishing to write in their own language need to either fall back on pen and paper, or improvise by using incorrect characters as equivalents.

Africans need software which anyone can obtain at a reasonable price, or possibly even so-called public domain software or shareware, which costs virtually nothing. This will not only enable more Africans to use their own languages on computers, but also allow institutions such as banks to provide computer displays in languages other than those for which they currently cater. It will make the publisher's task easier and more cost-effective in that fewer manuscripts are received in handwritten or typed form, while those received on disk need not be taken through tedious conversion processes and countless search-and-replace runs. Software will need to be developed by the state, research institutions/ universities or donor organisations. It is unlikely that commercial enterprises (not in the computer software production business) will share computer software technologies in which they have invested considerably and that provides an edge over the competition.

Impeded cross-border trade

Much has been written, and even more said, about improving inter-African trade, and a number of bodies have been established to promote commerce between African countries. Overall, however, the situation is far from encouraging when it comes to books. Although the borders drawn so arbitrarily by the colonial powers when they partitioned Africa mean that there are many countries that share languages and that could therefore also share books, little inter-African trade in African-language publications actually takes place.

In education, for instance, the curricula and syllabi of even neighbouring countries frequently differ to such an extent – even in subjects such as mathematics – that books developed in one country cannot be used in another without significant adaptation. The issue of non-standardised orthographies discussed earlier adds to the problem.

There are also purely economic aspects to consider. There are several countries that have introduced protectionist measures, which limit the dissemination of books on a larger scale. In other cases, customs and other tariffs mean that imported books become so expensive that imports are not viable. Then there are exchange control regulations, which restrict the flow of payments for goods delivered and make many publishers think twice about exporting. Furthermore, transport links are often unreliable, with goods taking unreasonably long to arrive at their destinations or being lost altogether.

Finally, the bureaucracy, frustration and delays involved in getting consignments through customs can contribute to making exporting or importing books a rather unpleasant experience.

Essentially, therefore, most African publishers are forced to operate on little islands within the confines of their national borders, especially when it comes to African-language publications. The onus lies on governments to open up, as we have much to learn from and give to one another.

Conclusion

The discussion and evidence presented in this chapter demonstrates that publishing in African languages is not only possible, but can be conducted as a viable, profitable and sustainable commercial activity. However, it will not necessarily be an easy task to achieve this objective, and there are certain prerequisites that need to be met before any effort has even a moderate chance of succeeding. Publishers venturing into the field of African-language publication will have to overcome obstacles during the establishment phase and be prepared to deal with unfavourable conditions and factors as part of their normal publishing routine, as well as to take risks and accept compromise. Ultimately, publishing in African languages must be seen as a long-term investment, and – like any consumer-oriented industry – publishers need to create a market for their products before they can hope to generate profits.

African-language publishing has a role to play in personal betterment and national and regional development, and this role should not be underestimated. The contribution of African-language publishing lies not only in the creation of new employment opportunities, but also in the fact that it can help to produce a larger pool of better-qualified human resources through a better understanding of learning matter and a wider dissemination of a larger body of knowledge, thereby contributing to the development and improvement of the social and intellectual capacities of the continent as a whole.

It is essential that this be done by Africans for Africans and not through reliance on others.

Final thoughts



In conclusion, it is obvious that there is no education and learning where there is no good communication between the teacher and the learner. Moreover, where the medium of instruction is mastered by neither the learner nor the teacher, there is no efficient communication. This is still the case for most African pupils and teachers; hence the failure 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 organisations as well as the resistance by African communities against the potential and capacity of their own languages. The research team's 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 objection 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 with most likely up to five per cent of the national education budget; without taking into account the immediate, mid-term and long-term social and economic returns for the whole society and language industry.

Recommendations, suggestions for actions plans, checklists and management models have been derived from the findings in order to ease the transfer of research results into practice. Appropriate language-in-education policies, promoting the use of African languages as medium of instruction 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 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 and publishing, on which we should build. There are, for example, numerous mother-tongue literacy programmes, transcriptions of oral languages, community-based and non-governmental based organisations, publishers and writers, donor and development agencies and specialised university departments supporting initiatives and contributing to expansion of the use of African languages. Each of these initiatives needs to be encouraged in their respective settings and supported further. However, their potential cannot be realised 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 programmes. Every effort should be directed towards building on these existing resources. This means extending and expanding their work so that the development of terminology lists, dictionaries, schoolbooks, teacher education programmes and other related factors are directed towards resourcing the entire school system with mother-tongue-medium bi/multilingual education programmes. These multi-disciplinary research findings support much longer maintenance of the mother tongue as the language of instruction than currently is the case in early exit programmes. The principle should be, in this respect, "the longer the better".

There are successful models of education language policies being used in Africa and elsewhere in the world. The use of African languages as medium of instruction 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.

Appendix

Mother-tongue and bilingual education programmes in Africa

The research is based on review and analysis of the following programmes in mother-tongue and bilingual education in 25 African countries:

| Country | Programme |
|--------------|--|
| Benin | Programme of early childhood education in the mother tongue between 1975 - 1989 by Ministry of Education |
| Botswana | Formal education programme by Ministry of Education |
| Burkina Faso | <i>Programme d'Éducation Bilingue by Ministère de l'Enseignement de Base</i> (MEBA) / Ministry of Basic Education and Swiss Workers' Relief Agency (OSEO) |
| Burkina Faso | <i>Écoles Satellites /</i> Satellite Schools by UNICEF, Ministry of Basic Education and other partners |
| Burkina Faso | Non-formal Basic Education Centres (NFBEC) by Ministry of Education and UNICEF |
| Cameroon | <i>Projet de recherche opérationelle pour l'enseignement des langues au Cameroun</i> (PROPELCA) / Programme for Language Education in Cameroon by the University of Yaoundé |
| Chad | Programme for teaching in national language by Ministry of Education and GTZ/PEB |
| Eritrea | Mother-tongue education programme from the mid-1990s by Ministry of Education |
| Ethiopia | Mother-tongue education programme since independence by Ministry of Education |
| Ghana | Bilingual schools between 1971-2002 by Ministry of Education |
| Ghana | Local Languages Initial Literacy pilot project by Government Education Service |
| Ghana | Assistance to Teacher Education Programme (ASTEP) by GTZ |
| Ghana | Childscope project in the Afram Plains by UNICEF |
| Ghana | Shepherd School Programme (SSP) by Action Aid |
| Ghana | Teacher-training colleges by GTZ |

| Country | Programme |
|------------------|--|
| Ghana | Mass printing and distribution of textbooks and teacher guides in two major languages by World Bank |
| Guinea (Conakry) | Mother-tongue education programme between 1966 - 1984 by Ministry of Education |
| Guinea Bissau | Bilingual experimental schools between 1987 - 1997 by Ministry of Education, with the assistance of Dutch Cooperation (SNV) and a Portuguese NGO (CIDAC) |
| Kenya | Rehema School by Rehema Daycare, School and Orphan Centre |
| Liberia | Language and education policy for multilingual education by Ministry of Education |
| Malawi | Community Schools by Ministry of Education |
| Mali | Écoles de la Pédagogie Convergente by Ministry of Education, Centre international audiovisuel d'études et de recherches (CIAVER) of Belgium, Agence de coopération culturelle et technique (ACCT now OIF) |
| Mali | <i>Centres d'Education pour le Développement</i> (CED) / Education Centres for Development (ECD) by Ministry of Education |
| Mali | Literacy programme by <i>Direction nationale de</i> <i>l'alphabétisation fonctionnelle et de la linguistique appliquée</i> (DNAFLA) / National Directorate of Functional Literacy and Applied Linguistics |
| Mali | Non-formal education project for out-of-school children and women by Ministry of Basic Education and UNICEF |
| Mozambique | <i>Projecto de Escolarização Bilingue em Moçambique</i> (PEBIMO) / Experimental bilingual education in Mozambique between 1993 - 1997 by Ministry of Education |
| Namibia | Village School Programme in J/'Hoan by Nyae Nyae Foundation |
| Namibia | Ondao Mobile School project by Namibia Association of Norway (NAMAS) |
| Niger | Experimental bilingual schools by Ministry of Basic Education and GTZ-2PEB |
| Niger | Bilingual pilot schools French-Hausa by Ministry of Education |
| Nigeria | Six-Year Primary Project (Ife Mother-tongue Education Project) by Obafemi Awolowo University (former University of Ife) |

| Country | Programme |
|--|--|
| Nigeria | Rivers Readers' Project by the Rivers State Government |
| Senegal | <i>Écoles Communautaires de Base</i> (ECB) / Community schools for basic education by a partnership between the Ministry of Education, non-governmental organisations and the respective communities |
| Senegal | Non-formal education by Associates in Research and Education for Development (ARED) |
| Somalia | Mother-tongue education between 1973 - 1986 by Ministry of Education |
| South Africa | Project for the Study of Alternative Education in South Africa (PRAESA): Multilingual education, teacher and training of trainers programmes attached to the Faculty of Humanities at the University of Cape Town |
| South Africa | Mother-tongue education between 1955 - 2005 by Ministry of Education |
| Tanzania | Policies and facilities for Kiswahili in formal education, literacy programmes and post-literacy strategies since independence by Ministry of Education |
| Tanzania and South Africa | Language of Instruction in Tanzania and South Africa (LOITASA) Project by University of Dar es Salaam (Tanzania), University of Oslo (Norway), and University of Western Cape (South Africa) |
| Тодо | <i>École d'Initiative Locale</i> (EDIL) / Community Schools by respective community |
| Uganda | Basic Education in Urban Poverty Areas (BEUPA) by GTZ |
| Uganda | Community Oriented Primary Education (COPE) by GTZ |
| Uganda Zambia | Language education policy for UPE by Ministry of Education Primary Reading Programme by Ministry of Education in collaboration with DFID |
| Zambia, South Africa, Namibia, Botswana | Breakthrough to Literacy by the non-governmental organisation Molteno Project |

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This publication presents the results of comprehensive research that assesses the experiences of mother-tongue and bilingual education programmes in 25 sub-Saharan African countries in recent years. The role of language for education and learning in the African context is addressed with regard to policy and development; costing and financing; educational reform and governance; education models; classroom interaction; formal and non-formal education settings; literacy and publishing.

The review consists of three sections. In the first, two central comprehensive themes are set out: language politics and planning in the context of development; and theories of bi- and multilingual education models and their implementation in Africa. The second section shifts the focus to the key aspects of teaching, learning and assessment practices; the use of African languages in literacy and non-formal education. In the final section two African publishers explore the experience and potential of locally-based multilingual publishing with regard to supporting and promoting African languages and developing language industries and the creative sector.