

Language and inequality - could Africa learn from Asia?

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From Education for All to Learning for All

There seems to be general agreement that children learn better when they understand what the teacher is saying. In most classrooms in Africa this is not the case. Instruction is given in a language children do not normally use outside of school, a language they do not command and often hardly understand (Brock-Utne 2000, 2007, 2010; Brock-Utne and Hopson 2005; Brock-Utne and Skattum 2009, Prah and Brock-Utne 2009). In the 2000 World Education Forum in Dakar there was, according to Dutcher (2004), 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 are entering 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. Nadine Dutcher (2004:8) holds:

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

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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.

The World Bank has recently released its new Education Strategy 2020 called *Learning for All: Investing in People's Knowledge and Skills to promote Development* (World Bank 2011). One would think that the move from *Education for All* to *Learning for All* would signify a move from the teacher, the educator to the pupil, the learner. I had expected that this change in language would also lead to an analysis of why so many students, especially in Sub-Saharan Africa² drop out of school, repeat grades or sit year after year hardly learning anything. The World Bank Group also admits: "What matters for growth is not the years that students spend in school but what they learn" (World Bank 2011:2).

Literate in whose language?

In the new strategy the World Bank notes that for many students more schooling has not resulted in more knowledge and skills necessary for job creation. According to the World Bank group:

Several studies illustrate the seriousness of the learning challenge. More than 30 percent of Malian youths aged 15–19 years who completed six years of schooling could not read a simple sentence; the same was true of more than 50 percent of Kenyan youths (World Bank 2011: 6-7).

The first thing I asked myself when I read this sentence was: In whose language could the youth not read a simple sentence? In their own language or a language foreign to them, a language which they hardly hear around them. In an article on illiteracy in Sierra Leone, Kingsley Banya (1993) writes:

Only about 25% of the country's population were (in 1961) literate in English, which is the official language. However, most people are literate in Krio, which is the lingua franca of the country..... in absolute numbers there has been a tremendous expansion in the number of illiterates. As the population has increased, the number of literate people has not kept pace; 85 out of every 100 Sierra Leones are now illiterate (Banya, 1993: 163).

² According to the World Bank three-fourths of the countries that are the furthest from meeting the MDG on primary completion rates are in Sub-Saharan Africa (World Bank 2011:4)

Banya classifies as illiterate those Sierra Leones who cannot write and read English even though they may read and write Krio, the lingua franca of their country! If a native Englishman who reads and writes English, but not any other language, were likewise classified as illiterate, there would be many illiterates in the English-speaking world.

When I was a Visiting Professor at the University of Hiroshima in the fall of 2002 I made a great effort to learn to speak and understand *some* Japanese and talk a bit with my Fitness friends at the YMCA where I did my work out. I decided very quickly that in the time I was here, it would not be possible for me to learn to read and write Japanese since every sentence did not only contain the two alphabets hiragana and katakana but also the Chinese system kanji. It was a strange, but sobering experience, to become functionally illiterate. I used to do my aerobics training every day in the YMCA studio located within a supermarket close to where I lived. One day when I came, the whole place was shut and there was a big sign in Japanese script by the entrance. I tried another entrance and found the same sign. It was also closed. So I had to go back home with my sports equipment. Next day I asked why the place had been shut. One of the Fitness instructors answered: "It was not closed. Did you not see that we had put up a sign telling you to enter through the garage". I had to answer: "But I cannot read such a sign". Then the Fitness instructor said: "Oh, we have forgotten. You are illiterate." And of course I was. I *am* illiterate in Japanese.

A closer analysis of the document "Learning for All"

The first thing I did when I got the Education Strategy 2020 into my computer was to search for "language of instruction" and "medium of instruction". I got no hits on any of these concepts. I then searched for "mother tongue" and "bilingual education". I got four hits on "mother tongue", two in end-note 7 (p.78), one in box 3 (p.15) and one in a reference called "background note (p.70). End-note 7 runs:

It should be noted that French is not a mother tongue in Mali and that grade 2 is a very early grade in which to test a student in a language that is not his or her mother tongue (World Bank 2011:70).

In Box 3 (p.15) we find the following sentence:

Children in these age groups (between the ages of 6 and 8) benefit from the instructional use of their mother tongue, combined with instruction in the dominant language (World Bank 2011:15).

But it is not only children between the ages of 6 and 8 who benefit from having their mother tongue or a language they master well as the language of instruction but so do students of all ages all over the world. There is no sound educational reason why the dominant language, which in Africa is the former colonial language, should be used as a language of instruction at all. In Africa what is here called the dominant language is a language which children never hear outside of school and which only 5 to 10 percent of the population master. As Ayo Bamgbose (2005:255) correctly observes:

Outside Africa no one questions why the languages of countries with smaller populations in Europe should be used as medium, even up to and including the university level. What seems to be lacking in many African countries is the political will to break away from the colonial policy and practice of limiting mother-tongue education to lower primary classes. Where such a will exists much can be done in a short period of time.

The fourth time “mother tongue” is referred to and the first and only time the concept “bilingual education” appears is in the following reference (called background note on p.70)

Perez-Brito, C., and N. Goldstein. 2010. “Mother-Tongue Instruction and Bilingual Education in the World Bank’s Education Sector Strategy 2020.” *Background Note* for the Education Sector Strategy 2020. World Bank, Washington, DC

I have tried, without any success, to find this document among World Bank documents on the net. This background note does not seem to have had any effect whatsoever on the Education Sector Strategy 2020. It is bizarre that a document that claims to focus on learning does not discuss the language in which learning most easily takes place.

In a panel organised by the Association for the Development of Education in Africa (ADEA)³ at the CIES conference in Montreal 1st - 6th of May 2011⁴ the panelists

³ ADEA is directed by a Steering Committee composed of 21 aid agency representatives and 10 African Ministers of Education. (ADEA 2008: 16)

talked about ADEA's holistic view of education. In this holistic view the use of native languages as languages of instruction came as the top priority according to Hamidou Boukary, one of the panelists. The Strategic medium-term plan by ADEA for the years 2008 -2012 ⁵ (ADEA 2008:8) points at the following challenges for education in Africa

- the unequal distribution of educational resources
- high drop-out and repetition rates
- the mediocre quality of education measured in terms of learning outcomes
- the weak link between the education provided and the needs of the economy and society.

Both the high drop-out and repetition rates and the mediocre quality of education measured in terms of learning outcomes have directly to do with the use of an unfamiliar language as the language of instruction.

One of the seven priorities in the Plan of Action of the Second Decade of Education for Africa (2006-2015) launched by the African Union is “strengthening of teaching programs and materials with emphasis on mathematics and technology, the use of African languages, and the adaptation of curricula (priority 6). Ad hoc Working Groups and inter-country quality nodes are created to contribute according to needs and demand. ADEA has created five inter-country nodes. These are involved in

- teacher training and upgrading of teaching methods
- bilingual education and the use of African languages in teaching
- scaling up models for early childhood development
- education in rural areas
- literacy (ADEA 2008:15)

⁴ AFRICA SIG HIGHLIGHTED SESSION: From Donors to African Education (DAE) to the Association for the Development of Education in Africa (ADEA): A unique experiment in policy dialogue and social capital formation. Session no.542 held on *Thursday 5th of May from 3:45 to 5:15 chaired by Hamidou D. Boukary*, (ADEA) **Participants** were: *Richard Sack*, Independent Consultant/ Association for the Promotion of Education (Pro-Ed) who talked on: Historical context and factors that led to the establishment of ADEA. *Mamadou Ndoye*, Independent Consultant, France was supposed to have talked on: Achievements and limitations of ADEA, (but did not come) *Ahlin Byll-Cataria*, (ADEA) talked on: New strategic directions taken by ADEA: 2008- 2012 Strategic Plan and beyond. **Discussants** listed were: *Dzingai Mutumbuka*, (ADEA) and *Birger Fredriksen*, World Bank, who did not come.

⁵ <http://www.adeanet.org/adeaPortal/Docs/Strategic-Plan-Short-ENG-041108.pdf>

I have had the pleasure of contributing to a publication on the use of African languages in learning and teaching commissioned by ADEA and the UNESCO Institute for Education⁶ in Hamburg and partly sponsored by the German development agency GTZ (Alidou et al, 2006)⁷. An abbreviated and more popularized version of the document worked out as an advocacy brief was published in 2010 (Ouane and Glanz 2010)⁸.

English as the Language of Science and Technology

In 2005 I was for several weeks sitting hour after hour in the back of a class-room in a secondary school in Tanzania (Brock-Utne 2005). I observed students who did not understand what the teacher was saying when he spoke English, and often would ask the teacher to express himself in Kiswahili, a language they all commanded very well. My eyes fell especially on one gentle looking boy who was completely passive and obviously did not understand anything of what was going on. Once I heard him ask one of his class-mates in Kiswahili what the teacher was saying. When I spoke to him in Kiswahili in the break afterwards and mentioned that I had noticed that he did not understand the language of instruction, he admitted that my observation was correct. He did have great difficulties following the teacher, especially if the teacher did not switch to Kiswahili during the lesson. I asked him if it would not have been much better for him had the lesson been given in Kiswahili throughout. He admitted that it certainly would have been much easier. Then he would be able to understand what the teacher was saying. When I then asked him did he not think one should change the language of instruction, he said no he did not think so because English

⁶ Since 2007 the UNESCO Institute of Lifelong Learning (UIL)

⁷ The report *Optimizing learning and education in Africa - the language factor: stock-taking review on mother-tongue and bilingual education in sub-Saharan Africa* was first introduced during the conference on bilingual education and the use of local languages that took place in Windhoek August 3-5, 2005. It is described in the ADEA Newsletter of April-June 2005, see especially the editorial by Adama Ouane (2005). A revised edition was presented at the ADEA 2006 Biennial Meeting in Libreville, Gabon

⁸ A Kiswahili version of this advocacy brief translated by Martha Qorro appeared in 2011 under the title: *Kwa nini na kwa namna gani Afrika inapaswa kuwekeza katika lugha za Kiafrika na elimu kwa lugha nyingi*.

was the language of science and technology. English was the language of modernisation and all technological development. Without knowing English one could not get a good job. He had to learn English and could not see another way than having it as a language of instruction. I shall return to this very common misunderstanding.

Science Education and English Medium: The Sri Lankan Experience

It is difficult to understand where the belief comes from that science is better learnt in English than in other languages, a belief one often comes across in Africa. The claim seems unfounded. As Rugemalira and colleagues (1990: 31) maintain:

It should be demonstrated that countries such as Finland, Norway, China or Japan, which do not teach their children through the medium of an “international language” are isolated and have lost track of technological developments beyond their borders.

Lakshman K. Wedikkarage (2009) tells that Sri Lanka introduced her local languages, Sinhala and Tamil, as languages of instruction in education even before having obtained independence from Britain in 1948. Steps were taken to introduce these languages as media of instruction in all primary schools in 1945, secondary schools in 1953 and at the universities in 1960. Wedikkarage notes that local educationists all argued that the change of medium of instruction from English to local languages enabled the majority of students to learn science subjects in their mother tongue, nullifying the previous belief that studying these subjects in English would be an advantage. Local educationists in Sri Lanka argue that the mother tongue medium policy in Sri Lanka has contributed remarkably to the development process of the country. Sri Lanka enjoys a literacy rate of 91 per cent (the highest in South Asia and one of the best in developing countries). It can also boast of hundred per cent participation rates in primary education. In addition to the increased life expectancy in general, Sri Lanka is the only country in South Asia that is not considered a low income country .

A. Mahinda Ranaweera, the former Director of Education at the Curriculum Development Center, Ministry of Education, Sri Lanka wrote about the great advantages to the population of Sri Lanka of the introduction of Sinhala and Tamil as

the languages of instruction to replace English — *especially* for the teaching of science and technology:

The transition from English to the national languages as the medium of instruction in science helped to destroy the great barrier that existed between the privileged English educated classes; between the science educated elite and the non-science educated masses; between science itself and the people. It gave confidence to the common man that science is within his reach and to the teachers and pupils that a knowledge of English need not necessarily be a prerequisite for learning science (Ranaweera, 1976: 423).

Ranaweera relates that the change of medium of instruction in science and mathematics lagged behind the other subjects because of special difficulties, like the absence of scientific and technical terms, textbooks, and proficient teachers. Yet he found the greatest need to switch over to the national languages in the science subjects. He gives two reasons for this claim.

- First, science education was considered the main instrument through which national development goals and improvements in the quality of life of the masses could be achieved. Thus, there was a need to expand science education. The English medium was a great constraint which hindered the expansion of science education.
- Secondly, in order to achieve the wider objectives of science education, such as inculcation of the methods and attitudes of science, the didactic teaching approach had to be replaced by an activity- and inquiry-based approach which requires greater dialogue, discussion, and interaction between the pupil and the teacher and among the pupils themselves.

As Ranaweera (1976: 417) notes: “Such an approach makes a heavy demand on the language ability of the pupils and will be more successful if the medium of instruction is also the first language of the pupils” .

However the educational authorities in Sri Lanka in 2001 reintroduced English as a medium of instruction for science classes at collegiate level (Grades 12 and 13) also known as General Certificate of Education Advanced Level (G.C.E.A/L) in certain selected government schools. Wedikkarage (2009) critically analyses the discourses that led to a reverse in language of instruction for G.C.E. A/L science classes in certain selected schools at a time when such subjects were comfortably being taught in local languages. Lakshman Wedikkarage found that the major

objective of the reintroduction of English as a medium of instruction for G.C.E. (A/L) science classes was in reality to improve English language competence of students. The idea that English medium will lead to improved English competence of the G.C.E. (A/L) science students emerged as a central but totally unsubstantiated belief.

Generally, when admitting students to G.C.E. A/L science classes in privileged government schools, a very strict selection procedure has been adhered to. Since the demand for these schools is very high, only the very best students are selected. However, in order to fill up the English medium classes this strict selection mechanism was relaxed for students who promised to study A/L science subjects in English medium. Many of these students soon experienced that they could not study these subjects in English medium and sought permission to go back to mother tongue medium, creating big administrative problems in the schools.

According to the students Wedikkarage (2006) interviewed most of the teachers in these English medium classes resorted to either Sinhala or Tamil when they could not properly explain their lessons in English. According to the same students, the teachers were far more effective presenting their subject matter when they taught in their mother tongue. In Sri Lanka, a country where science teaching has taken place for nearly 40 years in the local languages, Sinhala and Tamil, it was difficult to find teachers who were willing and competent to teach such subjects in English.

The failure of the educational authorities to teach English effectively as a second language was used as a pretence to reintroduce English medium in the public school system in Sri Lanka. The study by Wedikkarage of the difficulties both teachers and students face when using English as a medium of instruction indicates that what is required in the Sri Lankan context is not to go back to English medium, as the two local languages are effectively used in the provision of education, but for students to learn English well as a foreign, yet important language. Most private sector employers do not demand job seekers to have studied in English medium. What the private sector requires are people with a good knowledge of English

The case of Malaysia

Some of us have argued that without mother-tongue education at all levels of education there is no future for African development (Prah and Brock-Utne, 2009).

The experience of post-colonial Asia and Western Europe point irrefutably to the inherent value in mother-tongue education or at least education in popular, widely spoken, local languages. We have frequently argued that the prosperity and economic prowess of modern Asia is, in no small measure, attributable to the use of languages confidently understood, spoken and written by the overwhelming masses of the people.

In July 2009, Associated Press (*New York Times, Asia Pacific*) wrote that;

Malaysia said Wednesday (8.7.2009) that it would abandon the use of English to teach mathematics and science, bowing to protesters who demanded more use of the national Malay language. Malay will be reinstated in state-financed schools starting in 2012 because teaching in English caused academic results in those subjects to slip, Education Minister Muhyiddin Yassin said. There have been months of high-profile demonstrations by politicians and linguists, especially from the ethnic Malay majority, who say a six-year-old policy of using English undermines their struggle to modernize their mother tongue. English was once the medium of instruction in most schools in Malaysia, a former British colony. Nationalist leaders switched to Malay less than two decades after independence in 1957. In 2003, Prime Minister Mahathir Mohammad started a programme to resume teaching math and science in English. Most other subjects are taught in Malay.⁹

By evidence of the record, Malaysia has covered a trying journey to where she stands today on the issue of language of instruction in education. In further elaboration and clarification of this in the news report, it was stated that;

Deputy premier Muhyiddin Yassin said that from 2012 the subjects will be taught in Bahasa Malaysia in national schools, or in Chinese and Tamil in vernacular schools. Critics of the six-year policy of using English to teach the subjects argue that it has dragged down students' performance and is particularly unfair on children who are not proficient in the language. "I wouldn't say it's a complete failure but it has not achieved the desired objectives that it was supposed to achieve," Muhyiddin told a press conference. "The government is convinced that science and maths need to be taught in a language that will be easily understood by students, which is Bahasa Malaysia

⁹ Malaysia Drops English for 2 Subjects. The Associated Press (*New York Times, Asia Pacific*). 8th July 2009. A version of this article appeared in print on July 9, 2009, on page A5 of the New York edition. http://www.nytimes.com/2009/07/09/world/asia/09malaysia.html?_r=2

in national schools, Mandarin in Chinese schools and Tamil in Tamil schools.”¹⁰

Interestingly, it would appear that whereas in Asia the broader masses demonstrate and protest in the streets in favour of the use of their local languages as languages of instruction for science and technological education, in Africa the elites lead the way in support of the use of the colonial languages as languages of instruction. One can say that Africa, in this respect, is moving in the opposite direction as modern Asia.

Many Africans admire the visible success of contemporary Asia in all areas of the social and economic lives of Asians but are unable to easily see the connection between this scientific, technological and economic ascendancy of Asia and the use of local languages as languages of instruction in education. If language is understood to be the central feature of culture and development is seen as ultimately a cultural phenomenon, it is not difficult to see the interconnections between language and development. In our introduction to a book on multiculturalism in Africa Kwesi Kwaa Prah and I are not suggesting that the use of the mother-tongue or the home language or the first language as the language of instruction automatically leads to social development (Prah and Brock-Utne, 2009). We are suggesting that there are other factors which contribute to development, but development cannot occur in the post-colonial circumstances of Africa and Asia without the centralization of the languages of the masses as languages of educational instruction.

But in Africa the colonial languages linger on

English seems to be growing as an international language in many parts of the world. But in Asian and European countries this means that English is taught earlier and for more hours as a subject than before. I was part of a consultancy team going to Mongolia some years back and noted that the first foreign language the pupils now had to learn was English and not Russian as it had been previously (Review 1999). But the language of instruction all through the educational system was Mongolian.

¹⁰ Malaysia Drops English for Math, Science Classes. Quoted from, Agence France Press (AFP). 9/07/2009. Mother Tongue Based Learning in the Philippines. A Blog for the MLE Consortium. <http://mothertongue-based.blogspot.com/>

“Of course” the Mongolians told me. “Mongolian is our language”. At the University of Oslo where I work, almost all of the teaching takes place in Norwegian. The few courses taught in English have been created to cater for non-Norwegian speaking international students.¹¹

In Africa the colonial languages linger on. Rwanda had since independence from Belgium retained French as the language of instruction and was termed a “francophone” country, though the whole population, Hutus and Tutsis alike speak Kinyarwanda and many of them also Kiswahili. In Parliament, in administration at the national level and in the Supreme Court Kinyarwanda is the language predominantly used. The 2003 Education Sector Policy declared the following policy on teaching languages (Rwanda 2003:23, here taken from Rosendal 2010:130).

Kinyarwanda, French and English shall continue to be offered in schools: Kinyarwanda as medium of instruction and English and French as subjects in all lower primary schools as well as private, whilst either English or French will be offered as a medium of instruction in the upper primary cycle and in secondary schools.

In a field-work undertaken by Rosendal in 2006 she found that most primary schools in Kigali used French as language of instruction while Kinyarwanda was more frequently used in the country-side. In an article published in the same year Michele Schweisfurth (2006:703) mentions that the Government of Rwanda at the time insisted on a trilingual education policy (Kinyarwanda, French and English) to secure greater equity between groups who favoured one or the other language. Schweisfurth (2006) notes, however, that “development” partners, at the time, expressed concern for the potential impact of a trilingual policy claiming that learners struggling in one language may be further handicapped by having to cope with three languages and that quality in education, as a dimension of EFA, may suffer. A trilingual policy might have been good for Rwanda provided that Kinyarwanda, a language which is spoken by 99.4 per cent¹² of the population (Rwanda 2005:38),

¹¹ It must, however, be admitted that over the last years publishing in English has given better economic rewards to the faculties, departments and individual researchers. Many of us see this as a threat to the further development of academic Norwegian and a threat to democracy (see e.g. Brock-Utne 2009)

¹² According to the 2002 census (Rwanda 2005:38),

had been the language of instruction and French and English learnt as foreign languages, as subjects.

The “development” partners got their way and in 2008 both the national language Kinyarwanda and French were ousted from all levels of education and replaced by English (Rosendal 2010)¹³. The decision to use English as the MOI from the very first Grade of primary school was implemented at the end of 2008 in violation of recommendations by UNESCO and the African Union. The sudden change in language-in-education policy was not foreseen in any education sector documents. But on the 8th of October 2008 (Rwanda 2008, here taken from Rosendal 2010: 131) the Cabinet resolved as follows:

As a part of enhancing Rwanda’s role within the East African Community in particular, and at international level in general, Cabinet requested:

- The Minister of Education to put in place an intensive programme for using English in all public and Government sponsored primary and secondary schools and higher learning institutions;
- The Minister of Public Service and Labour to put in place a programme to help Government employees at all levels learn English, starting with Top Ranking Officials.

A better way to have strengthened the east African community would have been to make Kiswahili a language to be studied since both in Tanzania, Kenya and Uganda Kiswahili is more widely spoken and better known than English.

In a paper presented at the 2005 Oxford conference Rachel Hayman (2005) notes that in terms of education policymaking in Rwanda after the genocide, the UK and the World Bank have been the most Influential development partners. The development partners engaged in the textbook sector in Rwanda were: the World Bank, UNICEF and the UK (Hayman 2005:6). The UK was not involved in Rwanda prior to the genocide but is now the largest bilateral donor to Rwanda, and the largest education sector donor.

¹³ See Rosendal, Tove (2010).Linguistic Landshapes. *Ph.d. thesis*. University of Gothenburg. Can be retrieved at: <http://www.avhandlingar.se/avhandling/ccb1d24dee/> Will be published as a book in the autumn 2011 in Köln: Rüdiger Köppe Verlag.

Apart from donor pressure there has also been a transfer of models of educational policy and practice from neighbouring countries, such as Uganda and Tanzania, through the return of Tutsi refugees who fled the country before or during the genocide. Michele Schweisfurth (2006) terms this transfer '*second generation colonialism*', as a number of these policies have their origins in British colonial models. Though the children of the educated elite are able to cope in this system as a result of good and expensive private schooling, extra tutoring, assistance at home and extra resources, the masses of African children are not. The use of the x-colonial languages as medium of instruction in African schools increases inequality in the education system. So does the introduction of school fees and the creation of private schooling.

One of my Tanzanian students in the introduction to her master thesis recalls her own school days:

I can recall from my school days about my Chemistry teacher who every ten minutes or so he would ask us: "Any question students?" Nobody answered and he would conclude: "If there are no questions, then you have understood everything!" We did not understand him at all, not only because he taught in English only, he spoke American English! He was a Peace Corp. The issue was language, as it is in our contemporary schools (Mwinsheikhe 2001).

Halima Mwinsheikhe later got the opportunity to study the effects of using English or Kiswahili as the language of instruction in secondary schools in Tanzania. In their Ph.d. research, which was undertaken under the umbrella of the LOITASA¹⁴ project, Halima Mwinsheikhe (2007) and Mwajuma Vuzo (2007) let the same teacher teach the same topic first in English or Code-Switching and then some days later in Kiswahili. Two different secondary schools were used and six weeks spent in each of them. The experiment was going on in Form I and both quantitative and qualitative

¹⁴ The LOITASA (Language of Instruction in Tanzania and South Africa) project has been and is funded by NUFU (Norwegian Universities Committee for Development, Research and Education). The first phase of LOITASA (2001-2006) ended with a conference in Norway called *Languages and Education in Africa* (Brock-Utne and Skattum (Eds) 2009), a co-operation between five NUFU funded projects at the University of Oslo, all dealing with languages and education in Africa. The project has produced seven books so far, four in the first and two in the second phase (2007 – 2011), which all have been published in Africa. A seventh book consisting out of chapters from the first four books and picked out by independent reviewers was published in 2010 (Brock-Utne et.al. 2010). More information on LOITASA can be found on the LOITASA web-site: www.loitasa.org

data were gathered. Halima concentrated on biology lessons while Mwajuma concentrated on lessons in geography. I spent three weeks with them in the first school and two weeks in the second school. This I did both to increase the reliability of the findings and also to get some first-hand field experience. My own data were of a qualitative kind (Brock-Utne 2007).

Both Mwinsheikhe and Vuzo found that the test results were significantly better when the students were taught in Kiswahili than when they were taught in English. The whole class-room atmosphere was also totally different. The students were eager, asked questions, raised their hands and competed to answer and also argued against the teacher. When they were taught in English, they were sitting there passively, afraid to be asked a question. The teachers would also punish them by having them stand for long periods of time by their desks. The teachers never punished the students when they were teaching in Kiswahili. Similar results we found in a study in a black township in South Africa. Vuyokazi Nomlomo (2007) found that when children were taught in isiXhosa, the language they speak, they did significantly better than when they were taught in English.

In a study by Prophet and Dow (1994) from Botswana 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 those Form I students taught in English. In an experiment Lilliana Mammino (1995) conducted at the National University of Lesotho students who had written incorrect or meaningless statements in their chemistry papers were asked to explain their views on the given issues through their mother tongue to somebody who could then translate their answer into English. Mammino notes that in several cases, the translated answer corresponded to reasonable chemistry. The students had understood the chemistry, but not been able to express their insight in English. Further discussions highlighted the details of the language difficulties that had led to absurd or meaningless answers which often were related to grammar and sentence-construction, but also to the selection of individual words, or to how to combine them to express the desired meaning.

It is a strange and sad fact that Ethiopia, the only country in sub-Saharan Africa which was never colonized, should choose to use a foreign language, English, as the medium of instruction in secondary and tertiary education. In primary school, Ethiopian languages serve as languages of instruction, in some districts for the first four years only, in other districts for six years and in yet other districts for all eight years of primary school. Some of the Ethiopian languages (Amharic, Oromifa, Tigrinya, and more recently Somali) are used as languages of instruction also in the upper primary education, grades 7-8. On the basis of already existing data Mekonnen (2005, 2009) made an analysis of grade 8 achievements of students who had had Amharic, Oromifa, Somali, Tigrinya, or English as the LOI. He found that students who had gone through mother tongue education for the most number of years had higher mean achievement scores in Mathematics, Biology and Chemistry than students who had started with English as the medium of instruction in lower grades. The achievement of the two groups in English was mixed. Students whose LOI was the mother tongues – Afan Oromo¹⁵ and Somali – performed higher also in English as a subject than those students whose LOI was English. The English achievement scores of those students whose LOI were Amharic and Tigrinya were, however, slightly lower than those who were taught in Afan Oromo, Somali or English. A regression result of the data showed that a single variable (*i.e.* the English language) negatively contributed to achievement. This means that students taught through the English language achieved less than those taught in the other languages (*i.e.* Amharic, Oromifa, and Tigrinya).

Just like Vuzo and Mwinsheikhe show for Tanzania, Nomlomo for South Africa, Prophet and Dow for Botswana, Bamgbose (2005) for Nigeria and Mammino for Lesotho Mekonnen shows, that the use of English functions as a barrier to learning both of subject matter, the native languages, and English. Like in Tanzania in classrooms where the language of instruction is supposedly meant to be English, code-switching is the norm.

¹⁵ Another term for *Oromifa*. I have respected the author's spelling, though the Oromo themselves usually write *Afaan Oroma* and *Oromiffa*.

Mekonnen (2005, 2009) found that from a pedagogical point of view, the use of mother tongues in education is an objective advantage while the use of a foreign language is an objective disadvantage for students' performance. The findings reveal that the use of mother tongues as LOI for mathematics and sciences at upper primary education (grades 7 and 8) has a positive impact on the students' mathematics and science achievement scores. Mekonnen concludes by noting that the most appropriate way to learn English would be to have English taught as a subject by teachers who are proficient enough in the language itself and equipped with appropriate methods of teaching the language. Other subjects are better taught in a language more familiar to students than English.

This seems to be rather self-evident yet the island of Zanzibar, off the coast of Tanzania, where the whole population speaks Kiswahili, is now reintroducing English as the language of instruction in mathematics, science, geography and ICT. In connection with a World Bank loan to the education sector an evaluation was commissioned showing that the competence in English was very low among primary school pupils, even among those who had an extra year for preparing to use English as the LOI in secondary school. The evaluation team found that "primary English does not provide an adequate basis for the switch to English in the secondary phase" (MEVT/ University of Bristol 2005:4). Yet they recommend: "Gradually introducing English medium teaching, starting first with one subject in, say std 4, increasing to core subjects, i.e. Maths, Science, Social Science by the end of Std.7" (MEVT/ University of Bristol 2005:5). The Ministry decided, partly built on this advice, to reintroduce English as the LOI from grade five in mathematics and science subjects, geography and ICT in all government primary schools (MEVT 2006).

Being tested in a language one does not understand

In an article on TIMSS and PISA the Norwegian professor of physics Svein Sjøberg (2006) mentions that the World Bank has put up as a conditionality for some developing countries that they have to introduce 'TIMSS¹⁶-like' tests in order to get

¹⁶ Trends in International Mathematics and Science Study (TIMSS)

support to the education sector. The World Bank finances the participation of several developing countries in the TIMSS tests. Sjøberg is afraid that the TIMSS curriculum will function as a norm or ideal the world over. Many developing countries, especially those with a colonial past, have worked hard to liberate themselves from curricula, books, tests and ideals of their former colonial masters.

When the World Bank Group in the Educational Policies for Sub-Saharan Africa, often abbreviated to EPSSA (World Bank 1988)¹⁷ argued that academic standards in African countries were low, it did so by referring to low test-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). It has to be remembered that these tests stem from a Western culture and entail Western concepts. It also has to be remembered that the majority of African students, who are required to take the tests, often have to do this in their second, and frequently even in their third or fourth, language, while the majority of students in Europe and Asia answer them in their mother-tongue. The WBG refers to an IEA mathematics test on which students in Nigeria and Swaziland answered just over half as many items correctly as students in Japan, the highest scoring country (World Bank, 1988: 39). Further results of IEA tests in reading comprehension, general science, and mathematics administered to some African countries led the WBG to draw the following conclusion: "The general conclusion to be drawn from these studies is that the quality of education in Sub-Saharan Africa is well below world standards" (World Bank, 1988: 40).

Educational researchers in Africa have since independence constantly been debating what quality in education may mean in their own context and how it should be assessed. Nyerere (1968:63) in his *Education for Self-Reliance* wrote:

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

¹⁷ For an analysis of this important document see Brock-Utne (2000)

education phase. Then such an examination should be designed to fit the education which has been provided.

In a seminar on educational research in Tanzania at the University of Dar es Salaam in 1984 the participants discussed what the concepts of quality “might mean in a country concerned with wider meaning of this concept than conventional measures of educational achievement” (Ishumi et al. 1985:12). The researchers were extremely skeptical of importing the whole apparatus of American research on classroom interactions and to “measure up Tanzanian students against batteries of tests that have been used transnationally by bodies such as the IEA. These approaches come out of very specific cultural milieux in northern industrialized countries” (p. 13) they concluded. Now the tests are coming back in a slightly different version.

In the 2003 TIMSS (Trends in International Mathematics and Science Study) mathematics test for grade eight, it was reported that out of the 45 countries that participated Ghana finished as number 44. Ghanaian students scored 276 compared to the international average of 466. In two articles in Ghana News Y. Fredua-Kwarteng and Francis Ahia (2005 a, 2005b) try to explain these low results. In the first article they discuss the results in mathematics, in the second the results in science. 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 characterized 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.

They find that the main reason why the students do not learn problem-solving and problem-posing skills has to do with 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 top-performed in the mathematics test; Taiwan, Malaysia, Latvia, Russia used their own language to teach and learn mathematics.

The two authors, who both are mathematics educators, argue that a Ghanaian student who is proficient in his or her native language would be likely to answer most of the questions correctly if the questions were translated into the native language of the student. The authors further criticize the tests for being rooted in a western, especially American, environment using concepts which are unfamiliar in Ghana, like a “parking lot”. From their professional experience, students are more likely to solve mathematical problems if they can relate to the cultural context of the problem.

Changing a belief system which has become *common knowledge*

Having English or French as the language of instruction does not promote understanding and learning in the majority schools in the so-called anglo- or francophone Africa. The great majority of pupils loose by it. They drop out of school, have to repeat grades, lose their self-confidence. So why does this system persist? Who profits from it? Whose interests does it serve? Some powerful groups like the publishing industry in Britain, the US and France profit from it. It is promoted by the former colonial powers and supported by parts of the African elite. At the LEA (Languages and Education in Africa) conference at the University of Oslo in June 2006 one of the African participants said: “We have to admit that we, the elites, profit from this system. We send our children to expensive schools with good English teachers. We see to it that they get private tutoring, buy text-books, supplementary readers and good DVDs for them. We are part of the problem.” Another African answered: “Yes, that *is* correct. We *are* part of the problem, but we are also part of the solution”. Most of the African academics know that the masses of people cannot learn if the learning is going to take place in a language they do not master. Some defend this system which may be to the immediate interest of their own children but not to their country, not to the masses of people, not to the economic growth of Africa.

Foucault (1988) claims that belief systems gain momentum (and hence power) as more people come to accept the particular views associated with that belief system as *common knowledge*. Some ideas, being considered undeniable “truths”, come to

define a particular way of seeing the world. At the moment also those who stand the most to lose from having a foreign language used as the language of instruction consider it as an undeniable “truth” that having English as the language of instruction is the best way to learn English. This is a false belief as much research has shown. It is, however, a belief that both donors, the former colonial powers, the publishing industry in the west and the African elite have interest in promoting. These power groups are, however, like Gene Sharp (1980) points out, dependent for their positions and political powers upon the obedience, submission, and cooperation of their subjects. They have an interest in promoting and maintaining the misconception that having a language teachers and students can barely communicate in will be of benefit for them. In reality this policy leads to Africans learning less than they could have had they been taught in a language they master.

Misconceptions are possible to alter. When the masses of Africans understand how this misconception holds them down and works to the advantage of the powerful, the allegedly powerless may unite to do away with the misconception.

African academics like Bamgbose (2005), Ouane (2005, 2009), Mazrui (1997), Mekonnen (2009), Qorro (2009), Desai (2006), Rubagumya (2003), Prah (2005), Nomlomo (2007), Vuzo (2007), Bgoya (1992, 2009), Makalela (2005), Mwinsheikhe (2007) see how the formal school sector is a re-colonisation of education in Africa through the curriculum promoted and the language of instruction used. These academics may to-day seem to be marginal cases but the hope for Africa lies in such people gathering sufficient momentum, and hence power, which will lead to political will, to have their views accepted as *common knowledge*.

At a point in time it was common knowledge that men and whites were more intelligent than women and blacks. This is not common knowledge any more. It was common knowledge that neither women¹⁸ nor blacks¹⁹ could learn mathematics. Now

¹⁸ Even at the time I went to elementary school in Norway the girls had fewer weekly lessons in mathematics than the boys had. There was a belief that girls could not learn mathematics and would not have any need for it. Instead we had home economics, a subject the boys did not have. In our mathematics textbooks there were some tasks marked with* and after the * it said: The girls do not need to do this task. The same was true at the final exam (Brock-Utne and Haukaa 1980).

¹⁹ My black students from South Africa tell me that in the apartheid times of South Africa there was a belief that Blacks could not learn mathematics and they hardly had any teaching of this subject.

the common knowledge is that women and blacks have the same ability for learning mathematics as men and whites have.

It may become common knowledge in Africa too that children learn better when they understand what the teacher is saying.

References

ADEA (2008) ADEA Strategic medium-term plan 2008 -2012.

Alidou, Hassana, Aliou Boly, Birgit Brock-Utne, Yaya Satina Diallo, Kathleen Heugh, H. Ekkehard Wolff (2006) *Optimizing Learning and Education in Africa – the Language Factor A Stock-taking Research on Mother Tongue and Bilingual Education in Sub-Saharan Africa*. ADEA 2006 Biennial Meeting Libreville, Gabon, March 27-31, 2006.

Bamgbose, Ayo (2005). Mother-tongue Education: Lessons from the Yoruba Experience. In: Brock-Utne, Birgit and Rodney Kofi Hopson (Eds). *Languages of Instruction for African Emancipation*. Cape Town: CASAS.pp. 231-257

Banya, Kingsley (1993). Illiteracy, Colonial Legacy, and Education: The Case of Modern Sierra Leone. *Comparative Education* 29(2): 159 – 171.

Bgoya, Walter (1992). The challenge of publishing in Tanzania. In: Altbach, P. (Ed.), *Publishing and Development in the Third World*. Hans Zell Publishers, London/ New York

Bgoya, Walter (2009). Reclaiming our Hearth: Publishing in African Languages in the 21st century. In: Brock-Utne, Birgit and Gunnar Garbo (Eds) *Language and Power. The Implications of Language for Peace and Development*. Dar es Salaam: Mkuki na Nyota.pp.308 - 320

Brock-Utne, Birgit (2000): *Whose Education for All? The Recolonization of the African mind?* New York/ London: Falmer Press. Reprinted in 2006 by africanabooks.org. Seoul: Homi Publishing.

Brock-Utne, Birgit (2005) Language- in –Education Policies and Practices in Africa with a special focus on Tanzania and South Africa – insights from research in progress. In: Lin, Angel M.Y. and Lin Peter W. Martin (Eds.) (2005): *Decolonisation, Globalisation. Language-in -Education Policy and Practice*. Clevedon: Multilingual Matters. pp.173-194

Brock-Utne, Birgit (2007) Learning through a familiar language versus learning through a foreign language – a look into some secondary school classrooms in Tanzania. *International Journal of Educational Development*. Vol.27. No.5. 2007. pp. 487 – 498

Brock-Utne, Birgit. (2009) Is Norwegian threatened as an Academic Language? In:

Brock-Utne, Birgit and Gunnar Garbo (Eds) (2009) *Language is Power. The Implications of Language for Peace and Development*. Dar es Salaam: Mkuki na Nyota. Oxford. African Books Collective. East Lansing: Michigan State University Press.pp.275 – 283.

Brock-Utne, Birgit. (2010). Research and Policy on the Language of Instruction Issue in Africa. *International Journal of Educational Development*. Vol 30. No.4.pp.636-645
<http://dx.doi.org/10.1016/j.ijedudev.2010.03.004>

Brock-Utne, Birgit and Runa Haukaa (1980): *Kunnskap uten Makt. Kvinner som Lærere og Elever. (Knowledge without Power. Women as Teachers and Pupils.)* Oslo: Universitetsforlaget. Reprinted 1981 and 1984. German edition in 1986. *Wissen ohne Macht.Frauen als Lehrerinnen und Schülerinnen*. Gießen:Focus Verlag.195.pp.

Brock-Utne, Birgit and Rodney Kofi Hopson (Eds.) (2005): *Languages of instruction for African emancipation: Focus on postcolonial contexts and considerations*. Cape Town: CASAS and Dar es Salaam: Mkuki na Nyota pp.51-88.

Brock-Utne, Birgit and Ingse Skattum (Eds) (2009): *Languages and Education in Africa: A Comparative and Transdisciplinary Discussion*. Oxford: Symposium Books.

Brock-Utne, Birgit, Zubeida Desai, Martha Qorro and Allan Pitman, (Eds) 2010: *Language of Instruction in Tanzania and South Africa – Highlights from a project*. Boston, Rotterdam and Taipei: Sense Publishers

Desai, Zubeida (2006). Reflections on the LOITASA project in South Africa—three years later. In: Brock-Utne, Birgit, Zubeida Desai, Martha Qorro, (Eds.) *Focus on Fresh Data on the Language of Instruction Debate in Tanzania and South Africa*. Cape Town; African Minds,pp. 102–112.

Dutcher, Nadine (2004) *Expanding Educational Opportunity in Linguistically Diverse Societies*. Washington DC: Center for Applied Linguistics. New York:Teacher College Press

Foucault, Michel (1988). Power, Moral Values, and the Intellectual. An Interview with Michel Foucault by Michael Bess, *History of the Present*.Vol. 4, Spring. p. 1.

Fredua-Kwarteng, Y and Francis Ahia. (2005a). Ghana Flunks at Math and Science: Analysis (1).Feature article. *Ghana News* 8 January 2005.

Fredua-Kwarteng, Y and Francis Ahia. (2005b). Ghana Flunks at Math and Science: Analysis (2).Feature article. *Ghana News* 23 February.

Hayman, Rachel (2005) Are the MDGs enough? Donor perspectives and recipient visions of education and poverty reduction in Rwanda. Presented at the UKFIET Oxford Conference on Education and Development, September 2005

Ishumi, Abel, Donatus. Komba , Y.M. Bwatwa, Herme Moshia , Naomi Katunzi, S.T. Mahenge (eds.) 1985: Educational Research in Tanzania. *Papers in Education and Development*, Number 10, University of Dar es Salaam: Department of Education. February 1985.

Makalela, Leketi (2005). We speak eleven tongues. Reconstructing multilingualism in South Africa. In: Brock-Utne, Birgit and Rodney Kofi Hopson (Eds.), *Languages of Instruction for African Emancipation: Focus on Postcolonial Contexts and Considerations*. Mkuki na Nyota, Dar es Salaam, African Books Collective, State University of Michigan Press, CASAS, Cape Town, Oxford, East Lansing. pp.147-175.

Mammino, Liliana (1995). *Southern Africa Journal of Mathematics and Science Education*. Vol. 2 (1,2), 69–88.

Mazrui, Alamin (1997). The World Bank, the Language Question, and the Future of African Education. *Race & Class. A Journal for Black and Third World Liberation* 38 (3), 25–49.

Mekonnen Alemu Gebre Yohannes, (2005). Multilingualism in Ethiopia: Socio-Cultural and Pedagogical Implications of Mother Tongue Education in a Multilingual and Multiethnic Country. *M.Phil. Thesis in Comparative and International Education*. Oslo: University of Oslo Institute for Educational Research.

Mekonnen Alemu Gebre Yohannes (2009): Implication of the use of Mother-Tongues versus English as Languages of Instruction for Academic Achievement in Ethiopia. In: Brock-Utne, Birgit and Ingse Skattum (Eds) (2009): *Languages and Education in Africa: A Comparative and Transdisciplinary Discussion*. Oxford: Symposium Books. pp.189-200

MEVT (Ministry of Education and Vocational Training/ University of Bristol (2005): *Evaluation of the Orientation Secondary Class Zanzibar*. An evaluation funded by SIDA and conducted by Pauline Rea-Dickins and John Clegg from the University of Bristol and Casmir Rubagumya, University of Dodoma

MEVT (Ministry of Education and Vocational Training) (2006). *Education Policy*. Stone Town.Zanzibar

Mwinsheikhe, Halima Mohammed (2001) Science and the Language Barrier: Using Kiswahili as a Medium of Instruction in Tanzania Secondary Schools as a Strategy of Improving Student Participation and Performance in Science. *Master thesis* for the M.Phil. in Comparative and International Education.. University of Oslo: Institute for Educational Research. Spring term 2001.

Mwinsheikhe, Halima (2007) Revisiting the Language of Instruction Policy in Tanzanian Secondary Schools: A Comparative Study of Biology Classes taught in Kiswahili and English. *Ph.D.dissertation*. Oslo: Unit for Comparative and International Education

Nomlomo, Vuyokazi, S. (2007). *Science teaching and learning through the medium of English and isiXhosa: A comparative study at two primary schools in the Western Cape*. Unpublished Doctoral thesis. Bellville: University of the Western Cape.

Nyerere, Julius (1968). (issued in March 1967). Education for Self-Reliance, In *Ujamaa, Essays on Socialism*. Dar es Salaam: Oxford University Press. pp.44 – 76.

Ouane ,Adama (2005) Learning, but in which language? Editorial. *ADEA Newsletter* Vol17. No.2. April-June 2005

Ouane, Adama (2009). My journey to and through a multilingual landscape. In Prah, Kwesi Kwaa and Birgit Brock-Utne (Eds.), *Multilingualism - a paradigm shift in African language of instruction policies*. CASAS Cape Town. 52-62.

Ouane, Adama and Christine Glanz (2010) Why and how Africa should invest in African languages and multilingual education. UNESCO Institute for Lifelong Learning (UIL), Germany and the Association for the Development of Education in Africa (ADEA), Tunisia

Prah, Kwesi Kwaa (2005). In: Brock-Utne, Birgit and Rodney Kofi Hopson, (Eds.), *Languages of Instruction for African Emancipation: Focus on Postcolonial Contexts and Considerations*. Mkuki na Nyota, Dar es Salaam, African Books Collective, State University of Michigan Press, CASAS, Cape Town, East Lansing.

Prah, Kwesi Kwaa (2009). A tale of two cities: trends in multilingualism in two African cities: the cases of Nima-Accra and Katutura-Windhoek. In: Prah, Kwesi Kwaa and Birgit Brock-Utne, (Eds.), *Multilingualism – an African Advantage. A Paradigm Shift in African Languages of Instruction Policies* CASAS, Cape Town. pp.250-274

Prah, Kwesi Kwaa and Birgit Brock-Utne (2009) Introduction: Multilingualism – an African Advantage. In: Prah, Kwesi Kwaa and Birgit Brock-Utne (Eds.) (2009) - *Multilingualism – an African Advantage. A Paradigm Shift in African Languages of Instruction Policies*. Cape Town: CASAS pp.1-17

Prah, Kwesi Kwaa and Birgit Brock-Utne , (Eds.) (2009). *Multilingualism - An African Advantage. A paradigm shift in African language of instruction policies*. CASAS Cape Town.

Prophet, R. and Dow, J. (1994) Mother Tongue Language and Concept Development in Science. A Botswana Case Study. *Language, Culture and Curriculum*. Vol.7 . No.3: 205-217.

Qorro Martha (2009) Parents' and Policy-Makers' Insistence on Foreign Languages as Media of Education in Africa: restricting access to quality education. In: Brock-Utne, Birgit and Ingse Skattum (Eds) (2009): *Languages and Education in Africa: A Comparative and Transdisciplinary Discussion*. Oxford: Symposium Books. pp. 57 – 82

Review (1999) Review of Support to Educational Development provided by RDSSES (Royal Danish School of Educational Studies) to Mongolia, Nepal and Eritrea, April 1999. Review commissioned by DANIDA: desk study of the RDSSES involvement in Eritrea, 16 days field work in Mongolia. Together with Jeef Bech Hansen (team leader) and Jørgen Billetoft from RAMBØLL Consultancy firm and Wim Biervliet from Nuffic in the Netherlands. *Main report* (30 pp) and *Annexes to Main Report* (ca. 120 pp).

Rosendal, Tove (2010). Linguistic Landshapes. A comparison of official and non-official language management in Rwanda and Uganda, focusing on the position of African languages. *Ph.d. thesis*. Gothenburg: University of Gothenburg. Department of Languages and Literatures.

Rubagumya, Casmir (2003). English medium primary schools in Tanzania: a new "linguistic market" in education? In: Brock-Utne, Birgit, Zubeida Desai, Martha Qorro, (Eds.), *Language of Instruction in Tanzania and South Africa*. LOITASA. Dar es Salaam: E & D Limited. pp. 149 - 170

Rugemalira, J. M., C. M. Rubagumya, M. K. Kapinga, A. F. Lwaitama, and J. G. Tetlow, (1990.) Reflections on Recent Developments in Language Policy in Tanzania. In C. M. Rubagumya (ed.), *Language in Education in Africa: A Tanzanian Perspective*. Clevedon. Philadelphia: Multilingual Matters. pp. 25 – 36.

Rwanda (2005). *Census 2002*. 3ème recensement général de la population et de l'habitat du Rwanda au 15 août 2002. Caractéristiques socio-culturelles de la population. Analyse des résultats. Kigali: Ministère des Finances et de la Planification Economique/Commission Nationale de Recensement/ Service National de Recensement.

Rwanda (2008). *Statement on cabinet resolutions of 08 October 2008*. Kigali: The Prime Minister's Office in charge of Cabinet Affairs

Schweisfurth, Michele (2006) Global and Cross-National Influences on Education in Post-Genocide Rwanda. *Oxford Review of Education*, Vol 32, No 5, pp 697 – 709

Sharp, Gene (1980). *Social Power and Political Freedom*. Porter Sargent, Boston.

Sjøberg, Svein (2006) TIMSS, PISA og norsk skole (TIMSS, PISA and the Norwegian school). In: Brock-Utne Birgit, og Liv Bøyesen (red.) *Å greie seg i utdannings-systemet i nord og sør. Innføring i flerkulturell og komparativ pedagogikk, utdanning og utvikling*. (To cope in the education system in the North and the South. Introduction to multicultural and comparative education, education and development). Bergen: Fagbokforlaget. pp. 190 - 204

Vuzo, Mwajuma (2007) Revisiting the Language of Instruction Policy in Tanzanian Secondary Schools: A Comparative Study of Geography Classes taught in Kiswahili and English. *Ph.D. dissertation*. Oslo: Unit for Comparative and International Education

Wedikkarage, Lakshman (2006) English as Medium of Instruction for Collegiate Level Science Classes in Sri Lanka: theory, Policy and practice *Ph.D. dissertation*. Oslo: Unipub AS

Wedikkarage, Lakshman K (2009) Science Education and English Medium: The Sri Lankan Experience. In: Brock-Utne, Birgit and Gunnar Garbo (Eds.) *Language is Power. The Implications of Language for Peace and Development*. Dar es Salaam: Mkuki na Nyota

World Bank, (1988). *Education Policies for Sub-Saharan Africa: Adjustment, Revitalization, and Expansion*. Report No. 6934. Washington, DC: Author

World Bank Group (2011) *Education Strategy 2020. Learning for All: Investing in People's Knowledge and Skills to promote Development*. Washington DC: World Bank