Multilingual Education and Literacy: Research from sub-Saharan Africa

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Introduction

Countries of the global south have long histories of educating their children through local or regional languages which are used in the villages. They also have a rich literary tradition of scholarship, which pre-dates the colonial intervention that invariably resulted in the introduction of European languages, administrations and education systems. Today, with the rapid increase in the mobility of people, and the spread of global technologies, European, North American and Australasian education systems are grappling with how to manage linguistic and cultural diversity in the best possible manner. Books on bi-/multilingual education, mainly from Western-Northern perspectives (Heller, 2008; García, 2009; Blackledge & Creese, 2010), offer contributions on the utilization and the importance of inclusive approaches to education. However, these studies have limited traction in countries of the 'South' because they focus on the needs of linguistically diverse students who are regarded as minority students in a sub-set of majority mainstream systems. Despite increasing evidence of substantial 'South-led' research (Agnihotri, 2007; Mohanty et al., 2009; Ouane & Glanz, 2010; Heugh & Skutnabb-Kangas, 2010), academic contributions of the 'North' continue to disregard what has already been practised and learnt from valuable research in the 'South'. In this article. I discuss some of the most recent. large-scale research conducted on literacy and multilingual education systems in Africa; I

believe they may offer comprehensive findings

which may be relevant for countries where multilingualism and multilinguality (Agnihotri, 2007) are the norm, rather than the exception. Kenyan scholar Alamin Mazrui (2002) argues that solutions to the current failure of education to meet the needs of school pupils in Africa include the dissemination of research regarding what works well and what does not work. He further emphasizes the importance of multidirectional exchange of information, research and experience, i.e., from Africa to the diaspora (South-South and South-North), rather than the mono-directional North-South exchange which has undermined development in Africa since the nineteenth century.

'Invisible' African education practices

We know that Africa has experienced at least three well-defined periods of multilingual educational practice which pre-date colonial intervention. These begin with the early Egyptian use of hieroglyphics, through the Coptic Christian use of Ge'ez, to the spread of education in various African languages written in the Arabic script as evidenced in the manuscripts of Timbuktu in Mali. Scholarship in various languages, which peaked in the twelfth century in Mali, was ahead of the Italian Renaissance. Yet, the late nineteenth century European partition of Africa 'invisibilized' (Skutnabb-Kangas, 2000) African educational practices and records of this period. European or North American models of education, entirely out-ofkilter with the continent, and designed for societies in which there was a single dominant language, were superimposed on the diverse African communities. Such ill-fitting models, of which 'outcomes-based' or 'constructivist' curriculum is the most recent, have not only been costly and have incurred an Africa-wide debt, but they have also underserved students for one hundred and thirty years.

Nevertheless, recent African research (in liaison with development agencies such as UNESCO and the United Nations Development Programme-UNDP) has uncovered extensive data in language and literacy education, which may be useful for theoretical developments in international education and applied linguistics where these engage with linguistic diversity beyond Africa.

Part of international contemporary wisdom is that the longer children are in school, the more likely they are to access mainstream society and the economy. It is believed that successful students in mainstream state-provided education are those who succeed in developing high level literacy skills in the language(s) of the immediate community, which can later be transferred to high level literacy in a language of wider communication such as English, French, Spanish, Russian, Arabic or Mandarin, While research in Northern Europe and North America has pointed towards such findings in alternative-tomainstream programmes (e.g., immersion bilingual, two-way immersion), in neither setting have data been drawn from system-wide (mainstream) studies.

Such data have however been gathered from studies conducted in African countries, particularly in South Africa and Ethiopia, as well as from other multi country studies covering Sub-Saharan Africa (Alidou et al 2006; Heugh et al., 2007; Reeves et al., 2008; Ouane & Glanz, 2010, 2011). In addition to this, in an exchange of South-South research, the findings of a particularly interesting systemic study of

language education in Ethiopia have recently been debated in relation to multilingual education initiatives in Latin and North America, India, Nepal, South-East Asia and Burkina Faso. Scholars from these settings have contributed research and theory from the 'peripheries to the centre(s)' (Heugh & Skutnabb-Kangas, 2010). The implications of the Ethiopian and other studies of this volume point towards: decentralization of education to regional and local authorities, local skills development and community involvement in schools, provision of multilingual education, and improved rates of achievement. While this collection of studies may surprise stakeholders who are accustomed to looking North or West, it is generating international interest in what we do in the South.

The Ethiopian study

The Ethiopian study, which is backed with data collected from urban, rural and pastoral (nomadic) communities, demonstrates that it is possible even in one of the poorest countries of the world, to accommodate low cost linguistic, ethnic and faith-based diversity across an entire education system, and within a ten year timeframe (Heugh et al., 2007). The Ethiopian (federal) Ministry of Education adopted a new education policy in 1994, which included eight years of mother tongue education (MTE) along with the teaching of Amharic as a national second language, for all students whose mother tongue was not Amharic (this covered two-thirds of school students). In addition to this, the policy included the teaching of English as a Foreign Language from grade one, with a transition to English as a medium of instruction for secondary education (by grade nine). Like Afrikaans in South Africa, Amharic was used as a language of privileged political power and control in pre-1990 Ethiopia. Since Ethiopia had not succumbed to colonial rule, English had a limited role prior to this point. Political and educational changes in Ethiopia occurred along a similar timeline to those in South Africa during the 1990s, with interesting comparisons over the last two decades. By 2010, MTE had been implemented for at least six years of primary education in eight out of eleven Ethiopian regions, and for eight years in four out of these (accompanied by language development in 32 languages). The uptake of this policy in an environment where only Amharic, Afan Oromo, and a little English had been used as languages of education prior to this point is phenomenal, given the minimal resources at the disposal of the federal and regional governments.

During the data collection phase of the study on the medium of instruction in Ethiopian primary schools in 2006, what was particularly striking for the researchers was the availability and daily use of locally produced textbooks and learning materials in languages of the local community. What was even more remarkable was that, in contrast with the results of the field research conducted in the schools in South Africa, these books were used in class and taken home for homework tasks on a daily basis. In South Africa, where commercial publishers produce expensive school textbooks, these are usually locked away in cupboards, seldom given in the hands of students, and rarely allowed home (Reeves et al., 2008). While there have been considerable challenges within the Ethiopian education system, and it has serious flaws and risks, including a recent change in publishing policy, South Africa has a great deal to learn about effective education reform from this resource-poor country. So do other countries from the South and North, where youth whose languages and cultures receive less acknowledgement either exit school prematurely, or face social alienation.

The Ethiopian case offers a microcosm of each of the language education models currently implemented across Africa and in other diverse settings. While there is a single federal language education policy, the regions have implemented

it to different degrees. Systemic assessment in grade four and grade eight in the years 2000, 2004 and 2008 have provided the largest multilingual education datasets, across the world. These datasets illustrate the relation between the medium of instruction and student achievement across each of the language education models (zero MTE; 4 years of MTE; 6 years of MTE; a mix of 6 and 8 years of MTE—certain subjects in MT/MT for 6 years and another language for 8 years; and 8 years of MTE). The findings are historically and chronologically important.

Firstly, the data show that students with eight years of MTE outperform those with fewer than eight years of MTE. Students with a mix of six to eight years of MTE outperform those with six years of MTE, and students with six years of MTE outperform those with four years of MTE. This data correlates with the earlier data on African studies which indicates that students demonstrate higher levels of achievement with six years of MTE under ideal (well-resourced, experimental) conditions (Bamgbose, 2000), and with eight years of less well-resourced conditions (Alidou et al., 2006; Ouane & Glanz, 2010).

Secondly, the data suggest that students who learn three languages in the school system (including at least two scripts/orthographic systems) have higher levels of academic achievement than those who learn only two languages.

Thirdly, students' achievement in science declines sharply with fewer than eight years of MTE.

Fourthly, students who have at least six years of MTE before they switch to English medium, do best in mathematics.

Fifthly, where there is a higher concentration of rural and small urban centres, students exhibit higher levels of achievement than students in the more urbanized contexts. These findings correlate with higher community participation in schools and education in the rural and small towns. Despite frequent misconceptions about the low levels of involvement and interest of nomadic communities in education, the Ethiopian study revealed that even in pastoral societies, communities hold strong and informed views on education and the role of languages in education.

There is yet another critical phenomenon in relation to the data emerging from the Ethiopian study. While the MT/home language policy was implemented and given strong federal government backing between 1994 and 2002, a change in the education minister was accompanied by a change in focus towards a greater prioritization of English throughout the education system from 2003. A new set of plans was put in place to increase the role of English which emphasized the teaching of English in primary schools. By 2004, an English language consultant from the United Kingdom was brought in to develop an in-service teacher education programme to improve teachers' proficiency in English. This diverted 42 per cent of the teacher education budget towards a cascade model English language improvement from 2005, involving one hundred and twenty hours of intensive contact time for English language tuition and eighty hours of distance education. Within two years all primary school teachers in the country had participated in this programme. The data collected in 2006 elicited disturbing information about this programme and its efficacy. The report (Heugh et al., 2007) and the volume (Heugh & Skutnabb-Kangas, 2010), reveal the impact and 'washback effect' of greater prioritization of English on the achievement of students in the system at the time. Despite the enormous cost of providing in-service teacher education in English across the system, student achievement in the 2000 and 2004 assessments showed significant decline subsequent to the focus on English in the 2008 systemic assessment, particularly in mathematics and science. This has occurred subsequent to the roll-out of the English language improvement programme across several regions, and a switch to English medium, especially in mathematics and science (see Coleman, 2011 for critiques of over-dependency on English in developing countries.)

Lessons from the Ethiopian study

The Ethiopian case offers international educational theory not only large datasets which validate contemporary theory of bi/multilingual education, but also four valuable lessons.

- The first lesson is that it is possible, even with minimal expenditure, to develop, and implement multilingual education in resource-poor countries.
- The second lesson is that high cost intervention provided by experts from other countries (in this instance, a cascade model for English language improvement) does not always show positive returns on investment. In fact, in this case, the evidence points to lower levels of student achievement.
- The third lesson contributes to new theory that students who learn three languages have higher levels of academic achievement than those who learn two languages, particularly in mathematics and science.
- The fourth lesson indicates that students with longer MTE followed by a transition to English have higher achievement levels, particularly in mathematics and science.

The last two points counter earlier unsupported claims that the learning of more than one language detracts from students' potential achievement in mathematics and science.

Finally, Alamin Mazrui (2002) recommends that in order to transform the education system in Africa, more attention ought to be directed towards what can be learned from within the continent and from South-South exchanges of expertise, rather than looking towards models outside Africa. In fact, a lot can be learned from Ethiopia, and from a thorough investigation of education on the African continent through different historical periods dating as far back as ancient Egypt. Similarly, exchange of research experience between South Asia and Africa would also offer insights to European, North American and Australasian investigations on how best to include linguistic and cultural diversity in the curricula of Northern systems of education, both in respect of indigenous and migrant minority education.

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