

302. The role of mother tongues in the education of Indigenous, tribal, minority and minoritized children – what can be done to avoid crimes against humanity?¹

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Introduction: Why a focus on the role of mother tongues in educational models?

Disappearing linguistic diversity

A background for a focus on the role of mother tongues in educational models is the disappearing linguistic diversity on earth. Languages are today disappearing faster than ever before in human history. A language is endangered

- if it has few users (as all the world's 4-5.000 Indigenous languages have);
- if it has a weak political status (as all Indigenous and most minority languages have); and
- if children are no longer learning it.¹

According to the most 'optimistic realistic' linguists' estimates, half of today's oral languages may have disappeared or at least be very seriously endangered, meaning not be learned by children, around the year 2100 (e.g. Wurm, ed., 2001). The 'pessimistic but realistic' researchers estimate that we may only have some 10% of today's oral languages left as vital, non-threatened languages around 2100, or even 5% (Krauss 1992, 1996; Krauss, Maffi & Yamamoto, 2004).

The maintenance of diversity is counteracted by the increasing dominance of English (Phillipson, 2008, 2009) and other dominant languages. These are often learned subtractively, at the cost of the mother tongues (Skutnabb-Kangas, 2000), instead of additively, in addition to mother tongues.² Schools participate, through assimilationist education, in processes of linguistic capital dispossession (Harvey, 2005a, b; Skutnabb-Kangas & Phillipson, 2010), and reproduction of poverty (Sen, 1985; Misra & Mohanty, 2000a, b; Mohanty, 2000; Mohanty & Panda, 2007).

If this future scenario is not counteracted strongly and immediately, the estimate would be that most languages to go would be Indigenous, since indigenous languages make up around two thirds of the around 7000 spoken languages that exist today³ and most of the world's Indigenous languages would no longer be learned by children in 2100 or be completely extinct. The world's linguistic diversity is seriously threatened. Since much of the knowledge about how to maintain the world's biodiversity is encoded in the small Indigenous and local languages, with the disappearance of the languages this knowledge (which is often more accurate and sophisticated than "western" "scientific" knowledge, see ICSU 2002) will also disappear; this means destroying many of the prerequisites for human life on earth. During the last 200 years, the USA, Australia and Canada have caused more Indigenous/First Nations/Aboriginal languages to disappear or become very seriously endangered than any other countries in the world.

The medium of education is decisive for success or failure – but educational models need to be contextualised

The education of most Indigenous, tribal, minority¹ and minoritized (hereafter ITM) children in most countries today uses a dominant language as the main teaching language. This wrong choice of teaching language is the most important direct cause for not only the disappearance of languages, but also for the world's "illiteracy", and for the

fact that most ITM children are pushed out early from school or experience educational failure. It is very important to observe, that *minoritized* children can be a demographic majority in the country or area under discussion. Tibetan or Uyghur children, for instance, would be minoritized children in terms of the educational issues discussed here; so would many children in various African countries where their languages are not official languages or teaching languages in schools. Many African languages are minority/minoritized languages from a power point of view although they have more speakers than those of official languages. In many countries, all groups are minorities in this sense.

Still it is not *always* negative for *all* children to use a teaching language that children do not initially know – this can be and has successfully been used with dominant group children (see definitions of immersion programmes and dual-language programmes in Skutnabb-Kangas & McCarty, 2008). Thus UNESCO's 1953 recommendation that the mother tongue is always axiomatically the best medium of education is not true. It has to be qualified, in terms of whether the children come from dominant language groups, or ITM groups (for the latter the mother tongue is in most cases the best medium for at least the first 6-8 years). But there is more need for contextualisation. There are hundreds of models of education that are used even for ITM children.

This article discusses the role of mother tongues in the education of ITM children in the light of

- - how well various models reach the educational goals;
- - to what extent they support the maintenance of linguistic diversity on earth, and
- - to what extent they respect linguistic and educational human rights of children.

Some models for the education of children from linguistic majorities/ dominant groups will also be mentioned. We start with some of the concrete questions that educational authorities and parents have about how ITM education should be organised:

- What are the educational goals that should be reached?
- What kind of models of education have been used, with what results?
- What is the role of the ITM mother tongues in the various models?
- Which models reach the goals?
- What are the principles that should guide the education of ITMs if we build on solid research results?

Educational goals and educational models

Educational goals

A good educational programme for both ITMs and dominant group children should lead to the following goals from a language(s) and identity point of view:

1. high levels of multilingualism;
2. a fair chance of achieving academically at school;
3. strong, positive multilingual and multicultural identity and positive attitudes towards self and others.

In addition, there are many other goals which look at education from perspectives other than language and identity. A broad goal which includes children's competencies and capabilities for their lives as adults could be formulated as follows:

4. a fair chance of awareness and competence building as prerequisites for working for a more equitable world, for oneself and one's own group as well as others, locally and globally.

For Indigenous and tribal children, these goals/outcomes are built especially on the following formulations in human rights instruments (all the emphases are mine⁴). *The United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP)* states in Art. 13.1

Indigenous peoples have the *right to revitalize, use, develop and transmit to future generations their histories, languages, oral traditions, philosophies, writing systems and literatures, and to designate and retain their own names for communities, places and persons*" (Art. 13.1).

Art. 14 (1 and 2) states: "1. Indigenous peoples have the *right to establish and control their educational systems and institutions providing education in their own languages, in a manner appropriate to their cultural methods of teaching and learning*"; and "2. Indigenous individuals, particularly children, have the right to all levels and forms of *education of the State* without discrimination".

The first two quotes imply that the child has the right to learn the MT. Since most forms and levels of the "education of the State" (14.2) use the "State" languages as a medium, the child cannot have access to this education without knowing the State language. These quotes together imply that high levels of at least bilingualism (goal 1 above) must be a goal in the education of an Indigenous/ tribal child⁵. According to *ILO Convention No. 169*, Art. 29

The imparting of general knowledge and skills that will help children belonging to the peoples concerned to *participate fully and on an equal footing in their own community and in the national community* shall be the aim of education for these peoples. One of the implications is that Indigenous and tribal children's right to education is not respected unless they become bilingual and bicultural through schooling (especially Goal 1); otherwise they cannot participate fully in both communities. In order to be in contact with one's family, community, culture and ancestry, to know who one is and where one comes from, to be able to build a strong rooted identity, one needs a well developed mother tongue (or two). To be able to choose one's educational career and to have a choice on the labour market, and to participate in democratic processes in the country where one lives, one needs a well-developed national/official language (or two). Both/all are an absolute necessity for ITMs, and formal education plays a decisive role in the access to them (Goals 1, 2 and 4).

The Convention on the Rights of the Child (CRC) states in Art. 29 that the education of the child shall be directed to "[t]he development of the child's personality, talents and mental and physical abilities to their fullest potential". Goals/outcomes 2 and 3 above are aspects of this development "to their fullest potential". Art. 29 also asks education to be directed towards "the preparation of the child for responsible life in a free society, in the spirit of understanding, peace, tolerance, equality of sexes, and friendship among all peoples, ethnic, national and religious groups and persons of indigenous origin". Goal 4 above represents this direction.

Of course, the education of ITM children also has to fulfil further demands that can be made on any good education. These include issues about "the four A's"

(*availability, accessibility, acceptability and adaptability*) presented by the UN Special Rapporteur on the Right to Education in her reports, e.g. removing the barriers to access to education (Tomaševski, especially her 2001).

Presentation of educational model prototypes

The following prototype models for MLE, multilingual education, have been formulated⁶:

- Non-models of MLE
- Weak models of MLE
- Strong models of MLE.

We can already state that non-models and weak models do NOT reach the goals; only strong models do. What do these models look like?

Non-models and weak models

As we have already mentioned, the most important *pedagogical* reason for both languages disappearing and for "illiteracy" is the wrong medium of teaching. "*Non-forms* of bi-/multilingual education lead to monolingualism, and include: (1) mainstream monolingual programmes with foreign language teaching for dominant language speakers; (2) monolingual dominant-language medium programmes in which Indigenous/minority children learn the mother tongue/heritage language as a subject, often outside regular school hours; (3) submersion ("sink-or-swim") programmes; and (4) segregation programmes" (Skutnabb-Kangas & McCarty, 2008: 4). Most ITM children, including children from dominated minoritised groups, are taught through the medium of dominant/majority languages, *subtractively*, in *submersion* (sink-or-swim) programmes. *Subtractive teaching* through the medium of a dominant language replaces ITM children's mother tongues. It subtracts from their linguistic repertoire. Subtractive submersion or sink-or-swim programmes for linguistic minority children and other minoritized children belong to non-models of MLE. Non-models lead to enforced assimilation. Assimilation is enforced subtractive 'learning' of another (dominant) culture by a (dominated) group. Assimilation means being forcibly transferred to another group.

Majority/dominant group children also have non-models: "mainstream" monolingual programmes, maybe with some foreign language teaching as a subject. An example would be German children in Germany, taught through the medium of German, and learning some English or French in school as a foreign language subject. Likewise, Han Chinese children in China, taught through the medium of Chinese, and learning a little English in school as a subject. In , for instance, the USA and Britain, very few dominant group children learn any foreign languages in school and the numbers have been diminishing. Some Spanish and Chinese lessons and even two-way programmes exist, but they are an exception.

Weak models aim for strong dominance in a majority/dominant language, and include transitional (1) early-exit, and (2) late-exit programmes. In *transitional early-exit and late-exit* programmes "ITM children with a low-status mother tongue are initially instructed through the medium of their mother tongue for a few years; the mother tongue is used as an instrument for acquisition of the dominant language and content. In *early-exit* programmes, children are transferred to a majority-language medium programme as soon as they develop (some) oral communicative competence in the majority language, in most cases after one to three years. In *late-exit* programmes children may receive some instruction through L1 up to the fifth or sixth grade; sometimes the mother tongue is taught as a subject

thereafter. For both program types, the primary goal is proficiency in the dominant language” (Skutnabb-Kangas & McCarty, 2008: 13).

Strong models

Instead of non-models or weak models being used, ITM children should be taught additively. *Additive* teaching, through the medium of the ITM mother tongues, with good teaching of a dominant language as a second language, adds to ITM children’s linguistic repertoire and makes them *high level bilingual or multilingual*. They can learn their own language and other languages well. Additive teaching can lead to integration, instead of assimilation. Integration is characterized by voluntary mutual additive 'learning' of other cultures. Integration means a choice of inclusive group membership(s). *Strong models* “include: (1) mother-tongue maintenance or language shelter programmes; (2) two-way bilingual (dual-language) programmes; (3) plural multilingual programmes such as the special European Union Schools; and (4) revitalisation immersion programmes for ITM children (and even adults – see, e.g. Olthuis, Kivelä and Skutnabb-Kangas, 2013). Only strong forms lead to high levels of bi-/multilingualism and are associated with greater academic success for language minority students” (Skutnabb-Kangas & McCarty, 2008: 4). Of these models, only the first one is decidedly meant for ITM children; the other two can have both ITM and dominant group children (see definitions of them in Skutnabb-Kangas & McCarty 2008).

Results of various educational models

Dominant-language-only submersion programmes, i.e. non-models, “are widely attested as the least effective educationally for minority language students” (May & Hill, 2003: 14, study commissioned by Māori Section of the Aotearoa/New Zealand Ministry of Education; see <http://www.minedu.govt.nz/>). This is something that has been known for a long time; at a “popular” empirical level since the mid-1700s and from research in several parts of the world for over a hundred years. Still submersion programmes dominate the education of ITM children. Why? First we present two false explanations. *Two false explanations: common sense, and parents’ choice*

If one wants to be charitable, one way of understanding why subtractive submersion is used might be that some of the scientifically sound and practically proven principles of how to enable children to become high-level multilingual with the support of the educational system are counter-intuitive and go against common sense. If indigenous or minority children who speak their mother tongue at home, are to become bilingual, and learn the dominant/ majority language well, a common sense approach would suggest that (1) early start, and (2) maximum exposure to the dominant language would be good ideas, like they are for learning many other things - practice makes perfect.

In fact, both are false, as Jim Cummins and many of us others have shown in hundreds of publications. What we have is an early start fallacy, and a maximum exposure fallacy. In fact, the longer ITM children in a low-status position have their own language as the main medium of teaching, the better they also become in the dominant language (even when they have less teaching in and through it), provided, of course, that they have good teaching in it, preferably given by bilingual teachers. There are literally thousands of studies showing this, all over the world, even in the poorest countries of Africa (for examples, see, e.g., books and articles by Heugh, Mohanty, Skutnabb-Kangas and their collaborators in the references).

But isn't it up to parents to choose what language to speak to their children and what language their school should be in? The claim is that the parents obviously have seen that it is better for their children to learn the big dominant language (even at the cost of the mother tongue)? The small languages have not been able to adapt to the modern world. They are useless on the labour market. That must be why they are being left behind. They have had their life-span and are giving space to more useful languages? The parents are themselves voluntarily killing the languages!!! And the youngsters want to be modern, urban, oriented towards cultural hybridity, with a multicultural lifestyle in friendships, music, the arts, eating and dress – they are not interested in traditional languages and knowledges. That is why parents have chosen to have their children educated through the medium of a dominant language, instead of mainly their own language. Aren't these claims correct?

Wrong! Most parents have no choice! For a choice to exist

- alternatives need to exist. Mother-tongue-based multilingual education (MLE) does not exist today for most ITMs - they HAVE to accept dominant language-medium education
- parents need to have solid, research-based knowledge about the long-term consequences of their choices
- parents need to know that all languages are fit for education, and that either/or is a false ideology. Children can learn BOTH their own language AND one or several dominant languages well if the education is organised to make this possible.

The United Nation's 2004 Human Development Report

(<http://hdr.undp.org/reports/global/2004/>)_links cultural liberty to language rights and human development. It argues that there is

no more powerful means of 'encouraging' individuals to assimilate to a dominant culture than having the economic, social and political returns stacked against their mother tongue. Such assimilation is not freely chosen if the choice is between one's mother tongue and one's future.

In fact, the term "choice" itself

is a misnomer. The whole logic of choice is predicated on the fact that human beings are rational seekers of self-interest and base their decisions on rational calculation and free will (Kabel, 2010).

People are supposed to weigh different alternative strategies and choose the one that maximises their benefits and profit. One type of 'proof' of the absence of a link between language and identity builds on rational-choice theory: If the link between identity and language were strong, the benefits of maintaining a mother tongue would weigh more than the benefits of shifting to a dominant language. The 'exponentially increasing phenomenon of language shift' can only be explained by 'the absence of a link between identity and particular languages', Stephen May writes (2005: 328-329). Kabel calls rational-choice theory

sacred liberal dogma. The fact of the matter is that parents 'make choices' with regard to languages under enormous structural constraints. Some of these constraints may be too flagrantly palpable to simply ignore: violence, dispossession, threat to life ... while others may be beyond the conscious awareness of the actors themselves. Also, given the overwhelming amount indoctrination and propaganda as well the systemic

violence that they are subjected to, parents can hardly be said to be meaningfully ‘choosing’ (Kabel, 2010).

Even the best legal support for mother-tongue-based MLE is often deceptive, e.g. because of draw-backs, or lack of implementation. Here are a couple of examples:

The United Nations Declaration on the Rights of Indigenous Peoples, mentioned above, says in its Art. 14.2 and 14.3

Indigenous individuals, particularly children, *have the right to all levels and forms of education of the State without discrimination* (14.2)

“States shall, in conjunction with indigenous peoples, *take effective measures*, in order for indigenous individuals, particularly children, including those living outside their communities, to *have access, when possible, to an education in their own culture and provided in their own language.* (14.3) (emphases added).

This sounds good, also because implemetations is required (“states shall... take effective measures”). But looking closely at the Articles shows serious economic discrimination. Since “education of the State”, through the medium of the dominant state language, is “free” (even if there are school fees even in elementary education in over 90 countries), most ITM children are forced to choose this. Their parents are “free” to establish and control their own educational systems, with their own languages as teaching languages - *at their own cost*. How many Indigenous and tribal peoples can afford this?

An Asian example. *The Indian Constitution* (Art. 350A), *The National Charter for Children* (2005) and *The National Curriculum Framework* (NCF) (2005), despite their different legal statuses, all support mother-tongue-medium (MTM) education. Implementation has so far been haphazard or lacking. Laws and regulations, including the latest *Indian Right to Education Act*, should be evaluated in terms of to what extent they not only enable but *mandate* ITM education that respects human rights and international law, as presented above. The latest Act does NOT, and very lively debate about it continues.

What is, then, the knowledge that parents must have to be able to weigh various alternatives? What does research say about results of the various models presented above?

What do research results say: comparing the models

The following main types of programme have been compared:

- a) completely dominant-language medium education from grade 1; (submersion, a non-model);
- b) early-exit transitional programmes, with mother tongue medium education for the first 1-2 years, followed by using a dominant language as the teaching language; (a weak model);
- c) late-exit transitional programmes where the transition from a mother tongue medium programme to a dominant language medium programme is more gradual but is mostly completed by grade 5 or 6; (also a weak model but better than early-exit) ; and
- d) programmes where the mother tongue is the main medium of education at least for the first eight years, or even longer (a strong model).

Research results comparing academic achievement of these children show unanimously that the children from programme types a) (dominant language medium) and b) (early-exit transitional) are as a group never likely to reach a native-like

competence in the dominant language. At the same time as they will not learn their own language to a high level either (they do not learn to read and write it, for instance, even if a writing system and materials may exist). Their academic achievement results are mostly very poor at a group level (even if some individuals may manage; for instance, in Canada, ITM children as a group are today in some aspects doing better than dominant group children). Children in c), late-exit transitional programmes fare somewhat better, but even their results are much below what they could be. Some examples are presented, first from early observations, then of later studies. The first two are from Skutnabb-Kangas & Dunbar, 2010, Examples 41 and 42.

The American Board of Indian Commissioners wrote in 1880: "...first teaching the children to read and write in their own language enables them to master English with more ease when they take up that study...a child beginning a four years' course with the study of Dakota would be further advanced in English at the end of the term than one who had not been instructed in Dakota. ... it is true that by beginning in the Indian tongue and then putting the students into English studies our missionaries say that after three or four years their English is better than it would have been if they had begun entirely with English" (quoted from Francis and Reyhner, 2002, p. 45-46, 77, 98).

A government resolution was formulated in (British) India in 1904 when Curzon was the Viceroy. It expressed serious dissatisfaction with the organisation of education in India. The extract below shows its present-day relevance, and perhaps suggests that postcolonial education and most minority education has failed to learn from earlier experience: "It is equally important that when the teaching of English has begun, it should not be prematurely employed as the medium of instruction in other subjects. Much of the practice, too prevalent in Indian schools, of committing to memory ill-understood phrases and extracts from text-books or notes, may be traced to the scholars' having received instruction through the medium of English before their knowledge of the language was sufficient for them to understand what they were taught. As a general rule the child should not be allowed to learn English as a language [i.e. as a subject] until he has made some progress in the primary stages of instruction and has received a thorough grounding in his mother-tongue. [...] The line of division between the use of the vernacular and of English as a medium of instruction should, broadly speaking, be drawn at a minimum age of 13".¹ (Curzon, quoted in Skutnabb-Kangas, 2009: 42).

The Ramirez et al.'s 1991 study, with 2352 students, compared three groups of Spanish-speaking minority students. The first group were taught through the medium of *English only* (but even these students had bilingual teachers and many were taught Spanish as a subject, something that is very unusual in submersion programmes); the second one, *early-exit* students, had one or two years of Spanish-medium education and were then transferred to English-medium, and the third group, *late-exit* students, had 4-6 years of Spanish-medium education before being transferred to English-medium.

Now a common sense approach would suggest that the ones who started early and had most exposure to English, the English-only students, would have the best results in English, and in mathematics and in educational achievement in general, and that the late-exit students who started late with English-medium education and consequently had least exposure to English, would do worst in English etc.

In fact the results were exactly the opposite. *The late-exit students got the best results.* In addition, they were the only ones who were estimated to have a chance to achieve native levels of English later on, whereas the other two groups were, after an initial boost, falling more and more behind, and were judged as probably never being able to catch up to native English-speaking peers in English or general school achievement.

The well-known Thomas & Collier studies (see bibliography under both names; see also <http://www.thomasandcollier.com/Research Links.htm>) include the largest longitudinal study in the world on the education of minority students, with altogether over 210,000 students, including in-depth studies in both urban and rural settings in the USA, included full immersion programmes in a minority language for dominant group children, dual-medium or two-way bilingual programmes, where both a minority and majority language (mainly Spanish and English) were used as medium of instruction, transitional bilingual education programmes, ESL (English as a second language) programmes, and so-called mainstream (i.e. English-only submersion) programmes¹. Across *all* the models, those students who reached the highest levels of both bilingualism and school achievement were the ones where the children's mother tongue was the main medium of education for the most extended period of time. This length of education in the L1 (language 1, first language), was the strongest predictor of both the children's competence and gains in L2, English, and of their school achievement. Thomas & Collier (2002) state “the strongest predictor of L2 student achievement is the amount of formal L1 schooling. The more L1 grade-level schooling, the higher L2 achievement” (p.7).

The length of mother tongue medium education was in both Ramirez' and Thomas & Collier's studies (as in most other studies) more important than any other factor (and many were included) in predicting the educational success of bilingual students. It was also much more important than *socio-economic status*, something extremely vital when reflecting on the socio-economic status of many indigenous peoples (only the Saami in all three Nordic countries are an exception⁷). The worst results, including high percentages of push-outs⁸) in both Ramirez and Thomas & Collier studies were with students in regular submersion programmes where the students' mother tongues (L1s) were either not supported at all or where they only had some mother-tongue-as-a-subject instruction.

Similar conclusions have been drawn in Africa. Early transition to an “international language of wider communication” across Africa is, according to Heugh (2008) accompanied by:

- Poor literacy in L1 and L2 (SACMEQ 11, 2005; Alidou et al., 2006; HSRC studies in S. Africa, 2007);
- Poor numeracy/mathematics & science (HSRC, 2005, 2007);
- High failure and drop-out rates (Obanya, 1999; Bamgbose, 2000);
- High costs/ wastage of expenditure (Alidou et al., 2006).

Initial MTE bilingual programmes with transition to L2/FL by year 2-3 show success over years 1 – 3, sometimes into the 4th year. This success starts to slow down in years 4 – 5. No early-exit (from the M-T) bilingual model has been able to demonstrate lasting educational achievement for the majority of pupils in countries anywhere in the world. More than 50% of learners never get to secondary school in African countries. In countries where there is a high through rate to secondary school

(e.g. South Africa) learners are not developing strong literacy, language or mathematical skills (Heugh, 2009).

Heugh et al.'s Ethiopian study (2007, 2010, 2011, Benson et al., 2011, Heugh & Skutnabb-Kangas, 2011), encompassed the whole country, where the districts were in 2007 free to choose how many years of mother-tongue-medium education they offered (8 was recommended) before the students were transferred to completely English-medium education in secondary school. The following is very short summary where the number of years through the medium of the mother tongue, teacher competence (are the teachers formally trained or not; are they trained through the medium their mother tongues, or through English), the socioeconomic conditions of the schools, and several other factors are also drawn in:

The new data and evidence from the Ethiopian countrywide study about the consequences of using the MT as a medium (MTM) in varying degrees from four to eight years, prior to a switch to English (foreign language) medium are of great significance for the international field.

- Students who receive MTM to grade 8, and whose teachers are trained in the MT achieve the highest scores across the curriculum (unless socio-economic conditions are particularly unfavourable).
- Students who receive MTM to grade 6 plus partial MTM to grade 8, achieve the next highest scores overall, but appear to have difficulty with science.
- Students who receive MTM to grade 6, and whose teachers are trained through the medium of the MT at least for the first four years of primary, achieve the third highest scores across the curriculum. These students are likely to have difficulty with mathematics and science and few would be expected to be retained to the end of secondary.
- Students who receive MTM to grade 4, plus an additional four or more years of learning the MT as a subject in a trilingual programme and multilingually supportive environment achieve nearly as well as those in MTM 6 bilingual programmes. Students who have MTM to grade 4 in poorly resourced and difficult social settings, achieve the lowest scores across the curriculum. These students experience greatest difficulty with mathematics and science and very few will be retained to the end of secondary.
- Students who receive a regional/local second language medium education do not succeed as well as students with six or more years of MTM. However, they achieve higher results than students with 4 years of MTM in difficult contexts, but less well than those students who have 4 years of MTM in more socio-economically stable contexts. Secondary school students from these programmes struggle with mathematics and science.
- Primary school students who learn three languages (even with two scripts) do not achieve less well than those who learn two languages. In fact, students with three languages usually outperform those with two, especially in programmes with 8 or a mix of 6 & 8 years of MTM.
- Between 60 and 80% of students in the regions which do not offer MTM 8 have limited educational prospects beyond primary school (Heugh & Skutnabb-Kangas, 2011: 265).

Quoting studies and statistics from the USA, Teresa McCarty (2004) writes about the consequences of “medium-of-instruction policies” She states, “Indigenous and other minoritized students experience the lowest rates of educational attainment, the lowest family incomes, and, particularly among Indigenous youth, the highest rates of depression and teen suicides” (p. 74)

Amy Tsui and James Tollefson conclude in their 2004 edited book *Medium of Instruction Policies*, on the basis of worldwide studies:

The use of a foreign language as the medium of instruction for children who are still struggling with basic expression in that language hampers not only their academic achievement and cognitive growth, but also their self-perception, self-esteem, emotional security, and their ability to participate meaningfully in the educational process (2004, p. 17).

There are hundreds of smaller studies showing similar conclusions, with many different types of groups and many languages, and from many countries⁹. And the knowledge is not new – many Indigenous people and others knew this already in the 18th and 19th centuries (see, e.g., Skutnabb-Kangas, 2009; Skutnabb-Kangas & Phillipson, 1989; Thomas, 2001). All these studies show both the positive results of additive mother tongue medium maintenance education, and the mostly negative results of subtractive dominant-language medium education.

Only strong models (namely language maintenance (language shelter) programmes for ITMs, two-way programmes, the European Union Schools model for ITMs and dominant group children, and immersion programmes – in the classical form for linguistic majorities) reach the educational goals. Revitalisation immersion for Indigenous and Tribal children most probably do too, but there are so far too few studies of them (and large-scale studies are not possible in any case because the groups are inevitably small).

All strong models (for both ITM and dominant group children) use mainly a minority language as the main teaching language during the first many years. The longer it is used, the better the results in terms of high levels of bi- or multilingualism and school achievement. A dual-language model combines an immersion programme for dominant language speakers and a maintenance (or, minimally, late-exit transitional) programme for ITM children.

Virginia Collier and Wayne Thomas are “conducting a major research study on dual language education for the whole state of North Carolina -- it involves analyzing all student records for the state, over a five year period -- approximately 3 million student records from the past two years analyzed so far [...] They now have 36 schools doing two-way dual language (mostly Spanish-English; one program is Mandarin Chinese-English). In our first year findings, all student groups (English learners, Latinos, whites, blacks, low SES students) attending dual language classes were doing better than their comparable peer groups not in dual language. By sixth-seventh-eighth grade (middle school years), the dual language students are a whole grade ahead of their comparison groups” (Virginia Collier, private email 15 September 2010).

Some additional recent examples of either strong models or models which are at present transitional but are developing towards strong models are presented in the articles in Garcia, Skutnabb-Kangas & Torres-Guzman (eds), 2006; Skutnabb-Kangas, Phillipson, Mohanty & Panda (eds) 2009; Heugh & Skutnabb-Kangas (eds), 2010. Most of them represent mother-tongue-based multilingual education, MLE, from Ethiopia, the

Basque Country (Spain), Bolivia, Botswana, Burkina Faso, Canada, Ethiopia, France, Guatemala, India, Mexico, Nepal, Peru, the Saami country (Finland, Norway, Sweden), UK, and the USA. For instance, the uniquely broad study across all the regions which was commissioned by the Ethiopian Ministry of Education (Heugh, Benson, Berhanu & Mekonnen, 2007) presented above shows very clear patterns of learner achievement at Grade/Year 8, 10 and 12. The country-wide Grade 8 evaluation data show that those learners who have 8 years of mother-tongue-medium (MTM) education plus English as a subject perform better across the curriculum (including in English) than those with 6 years or 4 years of mother tongue medium. The exception is the capital of Ethiopia where children hear and use English outside school and get slightly better results in English than rural children, despite fewer years of MTM education. The results are described and updated, and compared with several other countries, in several articles in Heugh & Skutnabb-Kangas (eds), 2010 and Skutnabb-Kangas & Heugh (eds), 2011.

Mother-tongue-based multilingual education (MLE) is a necessary linguistic human right (LHR). The most important LHR in education for ITMs, if they want to achieve the educational goals (and also reproduce themselves as peoples/minorities) is an unconditional right to mainly mother tongue medium education in non-fee state schools. This education (of course including teaching of a dominant language as a subject, by bilingual teachers) should continue minimally 8 years, preferably longer (Heugh, 2009; Heugh & Skutnabb-Kangas, 2010; Skutnabb-Kangas, 2000, 2008a, 2009; Skutnabb-Kangas, Phillipson, Panda & Mohanty, 2009). Today, binding educational LHRs are more or less non-existent. ITM education is organised against solid research evidence about how it should be organised. Is this what we want?

Linguistic human rights and ITM education

What are Linguistic Human Rights? What can they do?

What are Linguistic Human Rights (LHRs)? Are all language rights linguistic *human* rights? Hardly. A preliminary definition that I have used is: “(Some) language rights + human rights = linguistic human rights”. The question then is: which language rights should be included and which should be excluded? I have for decades defined LHRs as

only those language rights are linguistic HUMAN rights which are so basic for a dignified life that everybody has them because of being human; therefore, in principle no state (or individual) is allowed to violate them (see Skutnabb-Kangas, 2012, for a discussion of definitions).

Most linguistic majorities (e.g. native Danish-speakers in Denmark, German speakers in Germany, English-speakers in the USA, Mandarin speakers in China) have all educational and other LHRs. They take them for granted - but only for themselves. Most ITMs have few LHRs, and, especially, almost no binding ones in education (see Skutnabb-Kangas, 2000 for a thorough presentation and discussion of these¹⁰).

LHRs in education necessary for group maintenance and for linguistic diversity. When all children attend school, LHRs in education are necessary for any group to reproduce itself as a group. LHRs are necessary for maintaining linguistic and cultural diversity (and, as a mediating factor, biodiversity) on earth. And it is educational language rights, especially the right to mother tongue medium education, that are among the most important rights for any minority. Without them, a minority whose children attend school, usually has to accept subtractive teaching through the medium of a

dominant/majority language. It cannot reproduce itself as a minority. It cannot integrate but is forced to assimilate. The children cannot as a group achieve the educational goals. Even if some individuals may succeed, they do it *despite* the school, not *because of* the way the school is organised.

LHRs can be one way of

- promoting high levels of multilingualism and school achievement
- promoting high levels of multilingualism and school achievement
- promoting integration and defending people against forced assimilation;
- promoting high levels of multilingualism and school achievement
- promoting integration and defending people against forced assimilation;
- promoting positive state policies towards minority languages
- promoting the maintenance of the world's linguistic diversity;
- promoting conflict prevention; and
- promoting self-determination.

Next we will look at the relationship between LHRs and submersion education from several angles.

Can submersion education be labelled a violation against the right to education, linguistic and cultural genocide, and a crime against humanity?

Can most Indigenous and minority education in the world be claimed to participate in committing linguistic and cultural genocide, according to the genocide definitions in the UN Genocide Convention? The United Nations *International Convention on the Prevention and Punishment of the Crime of Genocide*¹¹ has five definitions of genocide. At least two of them, possibly three, are relevant for Indigenous and minority education:

Article II(e): 'forcibly transferring children of the group to another group'; and
Article II(b): 'causing serious bodily *or mental* harm to members of the group';
(emphasis added).

Can this education also be seen as a crime against humanity? Robert Dunbar (human rights lawyer) and I have explored these questions in several publications.

Expert Papers 1 and 2 for the UN Permanent Forum on Indigenous Issues

An Expert paper written for the United Nations Permanent Forum on Indigenous Issues (Maggia et al., 2005), looked at *violations of the (human) right to education*. The Expert paper contains sociological and legal argumentation where we show that to educate Indigenous/tribal and minority (ITM) children through a dominant language in a submersion or even early-exit transitional programme violates the human right to education. This right is encoded in many international human rights documents, also in the *UN Convention on the Rights of the Child*¹ (Art. 29). The Convention has been ratified by ALL other UN member states except two: Somalia and the USA...

Subtractive dominant-language medium education for ITM children

- prevents access to education, because of the linguistic, pedagogical and psychological barriers it creates. Thus it violates the right to education;
- often curtails the development of the children's capabilities, and perpetuates thus poverty;
- is organized *against solid research evidence* about how best to reach high levels of bilingualism or multilingualism and how to enable these children to achieve academically in school (as discussed above).

In our second Expert paper (Dunbar & Skutnabb-Kangas, 2008), we again considered the possibility that such subtractive educational policies, implemented in the full knowledge of their devastating effects on those who suffer them, may constitute international crimes, including genocide, within the meaning of the United Nations' 1948 Genocide Convention and other international documents. That States persist in such subtractive policies, given such knowledge, can, we conclude, *from an educational and sociological point of view* be described as a form of linguistic and cultural genocide. My 2000 book (818 pages) gives hundreds of examples of this.

Dominant-language medium education for ITM children can cause serious physical and mental harm. Subtractive dominant-language medium education for ITM children can have harmful consequences

- socially, psychologically, economically, politically:
- very serious mental harm: social dislocation, psychological, cognitive, linguistic and educational harm, and, partially through this, also economic, social and political marginalization
 - often also serious physical harm, e.g. in residential schools, and as a long-term result of marginalisation - e.g. alcoholism, suicides, incest, violence, illnesses, short life-span.

Our 2008 paper contains legal argumentation which shows that forcibly (i.e. when alternatives do not exist) educating ITM children in a dominant language in submersion and even early-exit transitional programmes is *at least sociologically and educationally genocide*. We need some more court cases to ascertain the precise interpretations of some concepts in the Genocide Convention's definitions. In any case this education might be legally labeled a crime against humanity. Our conclusion in the second Expert paper is:

The various forms of subtractive education to which indigenous children have been and continue to be subject results in very serious and often permanent harmful mental and physical consequences. It is now at odds with and in clear violation of a range of human rights standards, and in our view amount to ongoing violations of fundamental rights. It is at odds with contemporary standards of minority protection. In our view, the concept of "crime against humanity" is less restrictive [than genocide], and can also be applied to these forms of education. In our view, the destructive consequences of subtractive education, not only for indigenous languages and cultures but also in terms of the lives of indigenous people/s, are now clear. The concept of "crimes against humanity" provides a good basis for an evolution that will ultimately lead to the stigmatisation through law of subtractive educational practices and policies.

Crimes against humanity?

In our recent book (Skutnabb-Kangas & Dunbar, 2010; downloadable on the internet), we consider the extent to which the various forms of submersion education practiced both earlier and today by States could be considered to give rise to *international criminal responsibility*, exploring the application of the legal concepts of genocide, and of crimes against humanity. We also give dozens of examples of the harm done to children, and the forcible transfer of them to a dominant group.

The term ‘crime against humanity’, first used in the modern context in respect of the massacres of Ottoman Turkey’s Armenians of 1915, was translated into international legal principle in 1945. Although long associated with armed conflict, it is now accepted that they can also be perpetrated in times of peace, and can now be seen as part of customary international law. Although the concept is “sweeping”, it has a number of common features. First, they are “particularly odious offences in that they constitute a serious attack on human dignity or a grave humiliation or degradation of one or more persons”. Second, they are not isolated or sporadic events, but “are part of a widespread or systematic practice of atrocities that either form part of government policy or are tolerated, condoned, or acquiesced in by a government”. Third, such crimes can be perpetrated in time of war or in peace. Fourth, they are committed against civilians or, under customary international law, enemy combatants in armed conflicts (Cassese, 2008, p. 98-101). The most complete description of what constitute “crimes against humanity” is now set out in the *Rome Statute of the International Criminal Court* of 17 July, 1998 (the “ICC Statute”) (<http://untreaty.un.org/cod/icc/statute/romefra.htm>). In our book (which the very short description above is based on), we note the existence of a range of barriers to the application of either concept to forms of submersion education, in the absence of concrete court cases that could clarify some of the concepts. But we also note, particularly in relation to the concept of crimes against humanity, that the law is not particularly clear and is constantly evolving, which may make the application of at least some concepts of international *criminal* law to submersion education possible as the law develops.

“Given that the current language and education policies and their genocidal effects represent continuities of colonial policies, colonial regimes have to be held accountable for some of the enduring devastating consequences of their policies. From a legal and moral perspective, some form of reparation and restorative justice needs to be established” (Kabel, 2010). Investigating the extent to which international law can apply to ITM education is a step in this direction.

What language rights should individual children have in education?

In addition to the rights enumerated in section 2.1, *The Hague Recommendations Regarding the Education Rights of National Minorities* from OSCE's High Commissioner on National Minorities (<http://www.osce.org/hcnm/>) give some answers to what rights are needed in education. For minorities, mother tongue medium education is recommended at all levels, also in secondary education. This includes bilingual teachers in the dominant language as a second language (Art. 11-13).

[S]ubmersion-type approaches whereby the curriculum is taught exclusively through the medium of the State language and minority children are entirely integrated into

classes with children of the majority are not in line with international standards (The Explanatory Note, p. 5).

I formulated already in the 1980s suggestions for some of the *individual* rights that I saw as necessary for children when a Universal Covenant of LHRs is accepted – something that has not yet happened. In my view, such a Covenant should guarantee rights at an individual level in relation to 1. mother tongues, 2. other languages, 3. the relationship between languages, and 4. Being able to profit from education.

In relation to *mother tongues*, a Convention should guarantee that everybody has the right to

- identify with their mother tongue(s) and have this identification accepted and respected by others;
- learn the mother tongue(s) fully, orally (when physiologically possible) and in writing. This presupposes that minorities are educated mainly through the medium of their mother tongue(s), and within the state-financed educational system

In relation to *other languages*, a Convention should guarantee

- that everybody whose mother tongue is not an official language in the country where s/he is resident, has the right to become bilingual (or trilingual, if s/he has 2 mother tongues) in the mother tongue(s) and (one of) the official language(s) (according to her own choice).

In relation to *the relationship between languages*, a Convention should guarantee

- that any change of mother tongue is voluntary (includes knowledge of long-term consequences), not imposed.

In relation to *profiting from education*, a Convention should guarantee

- that everybody has the right to profit from education, regardless of what her mother tongue is.

Recommendations

What can governments do in order to promote multilingualism and school achievement?

Both Indigenous/tribal and minority education could be organised so as to promote high levels of multilingualism. Inspiring examples could come from ITM education in Nepal (Hough et al., 2009; Nurmela et al., 2010; Taylor, 2010; Yonjan-Tamang et al., 2009) and Orissa, India (Mohanty & Panda, 2007; Mohanty et al., 2009), the Saami country in Norway and Finland (Aikio-Puoskari, 2009), Navajo education in Arizona, USA (McCarty, 2009, 2010); national minority education in Ethiopia (Heugh, 2009; Heugh et al. 2007; Heugh & Skutnabb-Kangas, eds, 2010), Burkina Faso (Ilboudo & Nikiema, 2010), Finland (Swedish-speakers); immigrant minority education of Finnish children in Sweden (Peura Skutnabb-Kangas, eds, 1994), etc.

Looking at what those models have done that reach the educational goals sketched in 2.1 and that respect LHRs, we can deduce leading principles for strong models and formulate them as 8 recommendations (see Skutnabb-Kangas, 1988; the Recommendations are also in Skutnabb-Kangas & Dunbar 2010).

- 1. Support (= use as the main medium of education, at least during the first 8 years) that language (of the two that the child is supposed to become bilingual in

initially) which is least likely to develop up to a high formal level. This is for all IM children their own mother tongue. For majority children, it should be a minority language

- 2. Children should initially be grouped together according to their L1. Mixed groups are not positive initially.
- 3. All children are to become high-level bilinguals, not only minority children
- 4. All children have to be equalized vis-a-vis the status of their mother tongues and their knowledge of the language of instruction. Nice phrases about the worth of everybody's mother tongue, the value of interculturalism, etc, serve little purpose, unless they are followed up in how the schools are structurally organized and run.
- It is possible to equalize the children vis-a-vis their knowledge of the language of instruction in several different ways.
- 5. All teachers have to be bi- or multilingual.
- 6. Foreign languages should be taught through the medium of the children's mother tongue and/or by teachers who know the children's mother tongues.
- 7. All children must study both L1 and L2 as compulsory subjects through grades 1-12.
- 8. Both languages have to be used as media of education in some phase of the children's education, but the progression in how and how much each is used seems to vary for minority and majority children.

The ideal progression has been described in several ways in, for example, Skutnabb-Kangas & García, 1995. Below I outline a summary of what we know from research, first about the role of the MT, then the role of the second/foreign language, and differentiating between ITMs and dominant group children. For convenience, I call them here *MINORITY* and *MAJORITY*.

For *MAJORITY* children, the *mother tongue* must function as the medium of education at least in some cognitively demanding, decontextualised subjects, at least in grades 8-12, possibly even earlier. Initially in Canadian immersion programmes, the children had no teaching in the MT as a subject; now they do. Many have most of the teaching in their MT already from grade 6 – probably too early.

But *MAJORITY* children can be taught *through the medium of L2* at least in some (or even all or almost all) cognitively less demanding context-embedded subjects from the very beginning. L2 can also be the medium of education, at least partially, in cognitively demanding decontextualised subjects, at least in grades 8-12, as the European (Union) Schools show. Ordinary immersion programmes, for instance in Canada, do not do this (partly because they stop before this phase) and therefore their gains in the L2 are not as impressive (even if they are good) as in these EU schools.

For *MINORITY* children the *mother tongue* must function as the medium of education in all subjects initially. At least some subjects must be taught through L1 all the way, up to grade 12, but the choice of subjects may vary. It seems that the following development functions well:

- transfer from the known to the unknown, in relation to content;
- transfer from teaching of a language as a subject, to teaching through the medium of that language; this has been formulated as “first learning to read, then reading to learn”;

- transfer from teaching through the medium of L2 in cognitively less demanding, context-embedded subjects, to teaching through the medium of L2 in cognitively demanding decontextualised subjects.

The progression used for all children in the special European (Union) Schools seems close to ideal for minority children. The progression in relation to the (*minority*) *mother tongue* is as follows:

1. All subjects are taught through the medium of the MT during the first 2 years.
2. All cognitively demanding decontextualised core subjects are taught through the medium of the MT during the first 7 years.
3. There is less teaching through the medium of the MT in grades 8-10, and again more teaching through the medium of the MT in grades 11-12, especially in the most demanding subjects, in order to ensure that the students have understood, can express and critically evaluate them thoroughly.
4. The MT is taught as a subject throughout schooling, from 1-12.

The progression in relation to the *second language* in the special EU schools is as follows:

1. The second language is taught as a subject throughout schooling, from 1-12.
2. The second language becomes a medium of education already in grade 3, but only in one or a couple subjects which are cognitively less demanding and context-embedded (such as “European hours” or Physical education). Teaching can take place in mixed groups, but ideally together with other children for whom the language is also an L2.
3. Teaching in cognitively demanding decontextualised subjects only starts through the medium of L2 in grade 8, when the children have been taught that language as a subject for 7 years (grades 1-7) and have been taught through the medium of that language in cognitively less demanding context-embedded subjects for 5 years (grades 3-7). Children should not be taught demanding decontextualised subjects through L2 together with children for whom the language of instruction is their L1, before grade 8. In European (Union) Schools this is mostly not done even in grades 9-12 in compulsory subjects, only in elective courses.

Finally, I present some recommendations for ITM education, on the basis of the research results discussed. In choosing these recommendations I have used three criteria. Education following them should enable the children to reach the four goals listed in Section 2.1. It should be consistent with research results. And it should be consistent with human rights and other law, including soft law, on the education of indigenous/tribal peoples and of minorities¹.

Recommendation 1: the mother tongue should be the main teaching language for the first eight years

- 1a. ITM children should have their first or own language (or one of them, in case of multilingual children) as their main medium of education, during minimally the first eight years (but absolutely minimally the first six years), in non-fee state schools.

1b. Even if the MT might no longer be used as a teaching language after grade 8, it should be used orally in the classroom, and it should be studied as a subject throughout the entire education process.

Recommendation 2: good teaching of a dominant local or national language as a subject

2. ITM children should have good teaching of a dominant local or national language as a second language, given by competent bilingual teachers, from early grades, first orally. It should thereafter be studied as a subject throughout the entire education process. It should be studied as a second (or foreign) language, using second/foreign language pedagogy/methods; it should not be studied as if it were the children's MT.

Recommendation 3: transition from mother tongue medium teaching to using a dominant local or national language as a teaching language

3a. Some subjects can be taught through the medium of a dominant national language and/or an international language in the upper grades, but not before grade 7 and only if there are competent teachers.

3b. If necessary one or two practical subjects (physical education, music, cooking, etc) can be taught earlier through the medium of a second language, but cognitively and/or linguistically demanding subjects (such as mathematics, social sciences or history) should be taught in the child's first language minimally up to grade 7, preferably longer.

Recommendation 4: additional languages as subjects

ITM children should have an opportunity to learn further languages as school subjects, including a language in international use such as Arabic, Chinese, English, French, Hindi, Spanish, Russian, etc, if this is not a dominant local or national language mentioned in Recommendation 2 above.

Recommendation 5: context-sensitive cultural content and methods

Just using the MT as the main teaching language is not enough. The cultural content of the education and the teaching methods need to fulfil two requirements. First, they need to be context-sensitive and applicable in the situation that the indigenous/tribal people or minority is in: they need to respect the traditions, knowledges, values, history and identities of the group, including their status as oral or literate people, and the teaching methods need to be acceptable to the group (see, e.g., Hough, Thapa Magar & Yonjan-Tamang, 2009).

Secondly, the methods and content need to start from the children's and community's experience and knowledges and take the children from pragmatic everyday thinking to scientific thinking (including taking them from BICS – Basic Interpersonal Communicative Skills - to CALP - Cognitive-Academic Language Proficiency, in Jim Cummins' terms, see Cummins, 2009).

Recommendation 6: Well-trained bi- or multilingual teachers

It is self-evident that teachers need to be well-trained, but it is also imperative that teachers for ITM children are minimally bilingual. A monolingual teacher (and especially one who does not know the child's language) cannot compare the languages and explore with the child what is common to the languages and what needs to be learned separately for each. S/he cannot help the child develop the metalinguistic awareness that is the main factor behind the benefits that high-level bilingual or multilingual children have as compared with monolingual children (e.g. Mohanty, 1995). And a monolingual teacher is not a good role model for children who are to become bilingual. The teachers should be trained through the medium of the languages that they are going to teach in. This language should ideally be their mother tongue, but especially in Indigenous and tribal situations and especially in revitalisation situations this may not always be possible (see Olthuis et al., forthcoming, for this).

Recommendation 7: ITM parents and communities, and educational authorities need enough research-based knowledge about educational choices. Advocacy for sound models is necessary

If ITM parents are to choose the form of education that their children are to have, they need enough solid research-based information about the processes and methods of multilingual education and the long-term consequences of the alternatives (which have to exist), and of their choices. Otherwise the “informed consent” that indigenous/tribal peoples must give (see UNDRIP, section 2.1) is impossible, a sham. Educational authorities also need this information – few of them know enough and many decisions are today based on ignorance. Advocacy for sound models and the argumentation for them and the research behind them is essential.

Recommendation 8: Systemic changes in school and society are needed to increase access to quality education. This includes knowledge about how the present system harms humanity

Schools mirror societies. Systematic inequality in societies reflects and is reflected and reproduced in schools. Indigenous/tribal peoples and many minorities are at the bottom of societal hierarchies. Systemic changes at all levels are needed. Power holders need more information about how the present system harms not only indigenous/tribal peoples and minorities but the whole global society, through economic, educational and creativity-related wastage. On the basis of the diminishing linguistic diversity that schools are an important causal factor in, the present system also leads to loss of knowledge about how to preserve biodiversity and thus to worse conditions for humanity on the planet (e.g. Skutnabb-Kangas, Maffi & Harmon, 2003; Maffi, ed. 2001). My intention in this article has been to offer some tools for understanding why and what kind of changes might be needed and what some of the challenges are.

Conclusion

Linguistic diversity and biodiversity

In addition to the reasons discussed above, I want to mention two additional reasons for supporting LHRs and the maintenance of all the world's languages, here especially through additive MLE. First, linguistic diversity and biodiversity are correlationally and causally related. Knowledge about how to maintain biodiversity is encoded in small ITM

and local languages. Through killing them we kill the prerequisites for maintaining biodiversity (see Skutnabb-Kangas 2000; Maffi, ed. 2001, for details; see also www.terralingua.org). Lack of LHRs, especially in education, is co-responsible for “illiteracy”, lack of school achievement, educational waste, poor life chances; disappearance of groups/nations/peoples (through forced assimilation); and the killing of the world’s linguistic diversity and TEK (Traditional Ecological Knowledge), which are prerequisites for the maintenance of biodiversity.

Education is the most crucial input in fighting poverty

If we are interested in more equity in the world, in reducing the gaps between rich and poor, and in fighting poverty, we can use as a starting point economics Nobel Prize laureate Amartya Sen's (1985) conceptualisation of poverty as “capability deprivation”:

Even the relevance of low incomes, meagre possessions, and other aspects of what are standardly seen as economic poverty relates ultimately to their role in curtailing capabilities (that is, their role in severely restricting the choices people have) ... Poverty is, thus, ultimately a matter of ‘capability deprivation’ (Dreze & Sen, 1996, p. 10-11).

Thus, “poverty is no longer to be viewed simply in terms of generating economic growth; expansion of human capabilities can be viewed as a more basic objective of development (Misra & Mohanty, 2000b, p. 263). Since the loci of poverty, and of intervention, are in Sen's view, economic, social and psychological, and measures have to be taken in each of these areas, the central question in reducing poverty is:

What is the most critical (and cost effective) input to change the conditions of poverty, or rather, to expand human capabilities?” (Misra & Mohanty 2000b: 265). There is “a general consensus among the economists, psychologists and other social scientists that education is perhaps the most crucial input” (ibid.).

Skutnabb-Kangas & Dunbar (2010) have drawn the following conclusion:

Thus *if* poverty is understood as “both a set of contextual conditions as well as certain processes which together give rise to typical performance of the poor and the disadvantaged” in school, and *if* of “all different aspects of such performance, cognitive and intellectual functions have been held in high priority as these happen to be closely associated with upward socio-economic mobility of the poor” (Misra & Mohanty, 2000a, 135-136), *then* we have to look for the type of division of labour between both/all languages in education that guarantees the best possible development of these “cognitive and intellectual functions” which enhance children’s “human capabilities”. (p. 68-9)

The optimal division of labour between languages in ITM education should be clear from this article. Submersion promotes worldwide poverty; mother-tongue-based multilingual education with a strong model reaches the educational goals, respects linguistic human rights, and reduces poverty.

I interviewed the then Minister of Education in (Iraqi) Kurdistan, Abdul-Aziz Taib, on 15. March 2006. He said these memorable words:

“Every child in the world has the right to education through the medium of their mother tongue”.

Can the world afford not to make this true? Can the world NOT listen to the words of the Canadian Indigenous Chiefs Resolution (18/2010, passed unanimously at AFN Special Chiefs Assembly, December 14-16.2010, Gatineau, Quebec, Canada):

TITLE: **ACTIONS NECESSARY TO SAVE FIRST NATIONS LANGUAGES FROM EXTINCTION**

SUBJECT: Indigenous Languages

MOVED BY: Chief Bill Cranmer, Namgis First Nation, Alert Bay, BC

SECONDED BY: Chief Mike Mitchell, Mohawk Nation of Akwesasne, ON

WHEREAS:

- A. Our languages were given to us by the Creator and as such, they hold deep spiritual meaning describing our responsibilities and connecting us to all of creation.
- B. The right to educate our children in our languages is inalienable and an inherent Aboriginal and Treaty right.
- C. The denial of this right violates a growing body of international human rights standards and instruments, including the UN Convention on the Rights of the Child and the UN Declaration on the Rights of Indigenous Peoples.
- D. Our languages are integral to our civilizations, and the maintenance and revitalization of these languages are essential to the survival of First Nations as distinct societies in Canada.
- E. UNESCO reported in 1996 that the Indigenous languages of Canada were among the most endangered languages in the world, and a state of emergency was declared in 1998 by the Assembly of First Nations regarding the drastic decline of Indigenous languages in Canada.
- F. This dire state of our languages is the direct consequence of deliberate state policies that were designed to eradicate our languages, most notoriously through residential schooling.

- G. The Federal Government's apology for residential schools has done nothing to bring restitution for the linguistic and cultural destruction wrought by these schools and the teaching of our Indigenous languages in core programs in schools have failed to produce new speakers.
- H. Immersion education is now recognized not only as the most effective means of creating new speakers, but also, for improving educational outcomes and increasing educational success rates that are key to building strong and thriving communities and to the full realization of self-determination.
- I. Legislation recognizing the importance of respecting and promoting Indigenous languages (as in Manitoba, the Yukon, and NWT) is important, but virtually useless without financial resources to support education in Indigenous languages.
- J. There is an urgent need for leadership and action to promote and protect Indigenous languages from extinction.

THEREFORE BE IT RESOLVED that the Chiefs-in-Assembly:

1. Recognize and affirm that urgent action is required to promote and protect Indigenous languages.
2. Direct the Assembly of First Nations to:
 - a. undertake a nation-wide campaign to raise awareness about the benefits and critical importance of mother-tongue medium education using a variety of strategies, including conferences, brochures, Internet, TV and radio ads.
 - b. urge that the mother-tongue to be the official language in every First Nations territory or community.
 - c. promote the development of immersion curriculum, and immersion teacher training for all First Nations across the country.
 - d. support immersion programs not only for the young, but also for adults in communities with too few fluent teachers to support an immersion program for children.
 - e. support a court challenge establishing the constitutional right of First Nations to educate their children in the medium of their own languages.
3. Urge federal and provincial governments to:
 - a. work in meaningful consultation with First Nations Peoples to develop provincial and national legislation that not only recognizes and protects First Nations languages as an Aboriginal and Treaty right under Section 35 of the Constitution, but also mandates financial support for First Nations immersion programs equivalent to that enjoyed by French and English programs in Canada.
 - b. implement the international human rights norms and legally binding standards that are part of general and customary international law in the UN Declaration on the Rights of Indigenous Peoples, to ensure protection, respect and justice for all Indigenous rights, including those in treaties.

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¹ See UNESCO at <http://www.unesco.org/culture/ich/index.php?pg=00143> for Endangered Languages.

² See Skutnabb-Kangas 2008 for definitions of mother tongues, also for Deaf children.

³ The most extensive list of the world's languages, the *Ethnologue* (Lewis 2009), lists 6,906 languages; despite many errors, it is the best existing one. It is of course impossible to count languages in a reliable way anyway, because of the fluid boundaries between "languages" and "dialects".

⁴ The rest of this section builds on Skutnabb-Kangas & Dunbar 2010.

⁵ See also the discussion of Item 3, Lessons learned and challenges to achieve the implementation of Indigenous Peoples' Right to Education at the 1st session (Geneva, 1-3 October 2008) of the UN Human Rights Council's Expert Mechanism on the Rights of Indigenous Peoples, in *doCip Update* No 82, December 2008 – February 2009, pp. 11-15; also on doCip's website <http://www.docip.org>.

⁶ Colin Baker (1993) formulated the concepts of weak and strong models, building on models in Skutnabb-Kangas (e.g. 1984, 1990; these were built on Mackey, Fishman, and Gonzáles); I have developed them further. Carol Benson (2009) has discussed various models critically in terms of to what extent they are based on western contexts.

⁷ See Aikio-Puoskari 2005, 2009, Aikio-Puoskari & Pentikäinen 2001, Aikio-Puoskari & Skutnabb-Kangas 2007.

⁸ These are called "drop-outs" in deficiency-based theories which blame the students, their characteristics, their parents and their culture for lack of school achievement.

⁹ See summaries and references in, e.g., Baker 1993, Baker & Prys Jones 1998, references to Cummins in the bibliography, Dolson & Lindholm 1995, Huss 1999, Huss

et al. 2002, Leontiev 1995, May & Hill 2003, May et al. 2003, Skutnabb-Kangas 2000, in press f, ed. 1995, and the 8-volume series *Encyclopedia of Language and Education*, especially Cummins & Corson, eds, 1997.

¹⁰ See my home page, especially <http://www.tove-skutnabb-kangas.org/en/books-articles-since-2000.htm> and <http://www.tove-skutnabb-kangas.org/en/inpress.htm>, for books and articles updating the discussions; some of the articles can be downloaded.

¹¹ E793, 1948; 78 U.N.T.S. 277, entered into force Jan. 12, 1951; for the full text, see <http://www1.umn.edu/humanrts/instree/x1cpcpg.htm>.