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# Overcoming inequality in South Africa through *multi-bilingual* education: A set of teaching methodologies.

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## Abstract

The education of the majority of SA scholars is negatively affected by language inequality. *Multi-bilingualism* is offered as an appropriate post-apartheid approach that can counter the disadvantage of having to use a second language as a medium of instruction. It involves the use of two languages for learning (a common medium plus every learner's home language), irrespective of the number of language groups in the class. Learners work together in same-language pairs for task-based activities within a framework of sound teaching methodologies. Three innovative, *multi-bilingual* methodologies are offered for teachers in multilingual situations: the first is based on learner-talk, the second relates to the use of text and reading, and the third applies to the teaching of reading in the early grades. They have been tested on large and linguistically complex classes (of 40 learners and eight languages) and found to be suitable for use by monolingual teachers, cost-effective and practical.

## 1. *Multi-bilingualism* and the need for it

The Home Language Project's particular concern is language inequality and how this affects education negatively for the majority of learners in the country. Although all 11 of our languages are equal under the Constitution, their education status in our new democracy is not remotely equal. Apart from mother-tongue Afrikaans speakers, most parents are set on having their children educated through the medium of English and the South African public thinks this is the obvious way to go. Meanwhile, the resources inherent in the home language (HL) are poorly utilised or left outside the classroom door... or even banned by certain teachers.

In fact, having to use a second-language as a single LoLT (Language of Learning and Teaching) puts the majority of learners at a serious disadvantage (1). Whereas, if the second-language could be paired bilingually with the HL, the result could be empowering. For this, the Home-Language Project (HLP) advocates a *multi-bilingual* approach that will allow every learner to use his/her HL as a support medium at every stage. *Multi-bilingualism* refers to the use of a number of different language pairs in one place simultaneously (2). In our case, each pair contains one language common to all.

We seat learners in same-language pairs to be able to work together on certain tasks as *language buddies*. Having many working conversations going on at once in many different languages is not very different from having such conversations happening in a single language. In fact, pair work like this is much more manageable for teachers than the kind of group work which Outcomes-Based Education expected of them.

Each buddy pair works with two languages – the common language of the classroom (usually English) plus the learner's particular HL. The approach is simply bilingual from the individual's point of view.

*The Home-Language Project (HLP) was initiated by concerned parents in a group of English-medium former model-C schools in Johannesburg in 2001.*

Sipho Seepe describes the HL as “a sort of mental home where understanding is easier, more immediate and more complete” (3). Bilingualism can use this mental home for better understanding as well as other cognitive benefits. Therefore, besides the other critically important psychological, social, cultural, political and moral reasons for including HLs as media in any multilingual situation, there is an educational imperative for doing so.

The innovative methodologies described in this paper can be cost-effectively and practically applied by monolingual teachers, even in large and linguistically complex classes. They have been tested in classes with 40 or more learners and eight languages.

The HLP acknowledges the steps currently being taken to address a number of the critical issues in our education system, but believes that the language element in underperformance is being seriously underestimated. Classroom methodologies have never been systematically revised to address the complexities of learning through a second-language medium, or to pay the necessary respect to learners, their cultural context or current circumstances in the post-apartheid era.

There is a gulf between national policy and its implementation. Our Constitution demands both educational and language equity, and our national Language in Education Policy requires the development and maintenance of every learner’s HL as a base on which to develop other languages (*additive bi/multilingualism*). Our political leaders echo these principles on public platforms. But in practice, no real attempt has been made to implement them – the majority can only use their own languages in the first three grades if at all, unlike their English and Afrikaans-speaking counterparts, and if they are used thereafter it is unlikely to be in a way that is conducive to sound education. The result constitutes a serious social injustice that is reflected in the malfunctioning of our social and economic institutions at every level.

## **2. Beliefs which have become obstacles to using indigenous languages in education**

Government’s avoidance of any strategic planning to bridge this gulf may be due to a number of unquestioned beliefs, in particular:

- (i) The only way to learn good English is by using it as the Language of Learning and Teaching (LoLT).
- (ii) Using indigenous languages needs separate schools for different language groups, with all the negative apartheid baggage associated with this kind of separation;
- (iii) Using indigenous languages will never be accepted by the majority of parents because of their association with inferior Bantu education;
- (iv) African languages do not have the terminology for teaching Maths and Science;
- (v) A genuine attempt to use all our languages equitably in education would be unaffordable.

Each of these beliefs is considered briefly below.

### **2.1 The only way to learn good English is by using it as the Language of Learning and Teaching (LoLT).**

Using English as the LoLT will not by itself result in the level of proficiency required for English either in school or in the world of business or tertiary education. We have enough evidence of this in the performance of SA schools since the mid 1980’s. Moreover, using it as the sole LoLT detrimentally affects majority performance in subjects across the curriculum. A faulty channel which is unsupported cannot be expected to deliver a sound product.

Like any other additional language, English is learnt more easily and possibly to a higher degree of proficiency, if it can build on a strong linguistic base in the HL. Thereafter, gaining proficiency in English is about how English is taught and the environment created to support it.

The current policy of providing three years (Grades 1- 3) of learning in the mother tongue, is inadequate as a means of establishing this linguistic base (4, 5).

On the other hand, if both the HL and English as a second language can be used in a synergistic combination throughout schooling, the HL can continue to strengthen as a base for the development of English, while both languages support each other in the cognitive processing of subject concepts. But effective methodologies are required for this.

## **2.2 Separate schools will be needed for separate language groups**

Using a *multi-bilingual* approach a multilingual school, with an agreed common language as the main LoLT, can include all HLs as support media to provide effective education for all in the same school. It is imperative that apartheid geography is systematically dismantled and that separation between learners on the basis of language is minimised. The current 3-year mother-tongue policy (which is not achieving its purpose) serves as an extra obstacle to national social cohesion.

## **2.3 Using indigenous languages will never be accepted by the majority of parents**

The public has never been effectively informed about the degree of disadvantage implicit in a monolingual English system for the majority of learners. This information needs to be supplied together with an explanation of how *multi-bilingualism* can be used to improve learners' English, and differs radically from the apartheid approach. This requires political leadership and a systematic multi-media information campaign. Without these, many parents will not understand the need to use indigenous languages and will insist that their children can learn their mother tongue at home. However, there is evidence that many other parents would welcome the use of their HL in the teaching of their children. The fact that the HLP was initiated by parents and has been consistently supported by parents for 12 years in itself demonstrates this.

## **3.4 African Languages do not have the terminology for teaching Maths and Science**

Here our focus should be on how everyday language is used for understanding. The most important part of using language for learning lies not in terminology but in the teachers' methodology. Terminology of all kinds is "immersed in a sea of common words that constitute the backbone of communication" (6). First-language speakers of English have to be taught the meaning of all terminology through everyday English. That is how specialist terms are best taught irrespective of a learner's language. Problems arise when the learners' grasp of the ordinary language of the LoLT is weak or when the teacher's methodology does not require the learner to express concepts in his/her own words, but simply expects definitions to be learnt parrot-fashion.

In fact, terminology development for schools in our indigenous languages has taken off over the last 10 years headed by PRAESA, particularly in isiZulu and isiXhosa which have set the pace. Our National Language Service has compiled equivalent maths and science terminology for all grades up to Grade 12. The national

*Pupils with English as HL need only one LoLT and should have the choice of learning either one other language at First Additional Language level (FAL) plus a third language at a practical basic level (SAL) or 2 other SALs. In an Afrikaans community, parents might choose Afrikaans as main LoLT and English at FAL, with an indigenous language as SAL. Parents in KZN might choose isiZulu as main LoLT (+ English at FAL), while a Venda child in such a classroom should be able to use English + Tshivenda in the methodology proposed below, but will also need isiZulu as a FAL.*

Workbook Project has added further weight to this work for Grades 1-6. They are available in all 11 languages as well as a 12<sup>th</sup> for preparing children for English as the LoLT. Most of our Greek- or Latin-based scientific terms can either be directly transferred or easily transliterated into other languages (7). We now just need sensible feedback from the real users (learners, teachers and academics) on what works best for them, to speed up and smooth out the process of natural language development via discourse which has been seriously impeded by our history.

There is evidence to show that African languages can be used very effectively in the teaching of maths and science and this should be made public (2, 8, 9).

## **2.5 Using indigenous languages in education would not be affordable**

The costs need to be properly analysed on the basis of currently available and cost-effective options which take our real needs and the current costs of educational failure into account. This should go a long way towards removing the fear of affordability that is being used as an excuse for inaction. For a start, the estimate that bilingualism would add less than 1% to our current education budget should be properly investigated (10).

The need for core *multi-bilingual* textbooks does not imply large extra numbers of text books, but this will be discussed later. We already have a massive backlog of text materials in our schools, demanding serious investigation of the e-text route being pursued by countries like Thailand, Turkey and the USA as soon as possible. It could drastically cut production costs and avoid a repetition of our recent distribution nightmares. Best of all, it has the multilingual potential that we need, e.g. a pupil can have an English workbook to write in while being able to refer to the parallel HL text on an e-tablet.

## **3. The role of the subject teacher in teaching language across the curriculum**

Since the late 1970's, a great deal of work has been done to address the inextricable element of language in the teaching of various school subjects. Amongst its conclusions is that the subject teacher has to ensure that both the content and the language of the subject are learnt (8).

An intensive study of the use of language in the teaching and learning of Chemistry by Liliana Mammino of the University of Venda is particularly enlightening for the SA situation. She describes the *understanding* (grasping the content) and *expression* of what the pupil has understood as two major components of school learning. Both are needed for real learning to happen. Whereas "understanding is enormously more effective through the mother tongue", the pupil also needs to be able to articulate this understanding in the language(s) of his/her audience. This might mean in the language of the class, or the language of an external examination (like the ANAs, matric or international assessments like PIRLS and TIMSS). At a tertiary level, the language is the *lingua franca* of the particular discipline (which in the case of Chemistry is English) (6).

Thus, where the main LoLT is a second language, using and moving between languages needs to be part of active learning. Teachers need to manage and support this learner activity. They do not need to be multilingual to play this role but they do need systematic methodology to do it effectively.

*Beyond terminology however, there is indeed a lot of catching up to be done in translation and text production of all kinds, particularly in the more marginalised languages. But what happened to the resolve to redress the past exclusion of African Languages from the educational process? And what if our educational needs demand such action? The first steps required of government are to remove the remaining political barriers to language development and support the efforts of others. Further steps need to be phased in and costs shared, e.g. universities need to re-open recently closed Language Units and assist with translation and research; publishers need to carry short-term translation costs which in fact constitutes good long term investment.*

Facilitating the development of language for both understanding and expression lies within the domains of both subject and language teachers. The latter can do a lot to build general language skills, while the former are best placed to teach the language of their particular subject. For best effect, language and subject teachers should be working as a team.

#### **4. Three methodologies for a *multi-bilingual* approach**

The approach is based on three linked *multi-bilingual* methodologies, as described below. The first two apply to all subjects across the curriculum – one is based on talking and the other on reading and the use of text for learning. The third focuses on the teaching of early reading skills. All three rest on currently recognised good practice and involve a task-based, learner-active approach. What is innovative is their linking together and adaptation to incorporate *multi-bilingualism*.

##### **4.1 A *multi-bilingual* oral methodology for task-based activities across the curriculum from Grade 1 to Grade 12. (This is abbreviated as “MB learner-talk”.)**

This methodology lays a foundation for the two that follow. It incorporates the support of the peer group and, most importantly, it builds on the oral cultural strengths of black South African learners. Taking only this first step has the potential to make a very significant difference to our educational performance.

Moreover, this is only about using learners’ existing oral skills and it requires no extra resources of any kind. Any teacher anywhere can use it effectively with the necessary training and support of school management.

###### **4.1.1 What does MB Learner-Talk involve?**

Learners are led into deeper thinking through talk in the HL with a same-language partner (*language buddy*). After completing the task they shift back into the common language of the classroom (usually English), for the teacher to pull together what everyone has learnt and to make any corrections necessary.

It involves learners in the oral use of and movement between Languages in a supported environment. It is not just a chance for learners to talk. It is purposefully applied in relation to particular tasks and only on the instruction of the teacher. It is a manageable approach that is not complex or difficult for a teacher to master.

Importantly, it is not about *teacher-talk*, nor about the kind of *code-switching* that involves teachers moving between languages to provide additional explanation. Perceived necessity has resulted in most of our teachers using such *code-switching*. However, it tends to lead to a number of other problems including the kind of learner dependency discussed later in this paper. *Multi-bilingualism* makes it mostly unnecessary. We should be encouraging our teachers to use their multilingual skills in other ways.

###### **4.1.2 The purpose of MB Learner-Talk**

It builds on the use of verbalisation – learners having to express ideas in their own words (silently, orally with a partner, or in writing) – to activate and deepen their thinking. It uses talk as a way to allow all learners to apply their own languages to thinking about tasks and grappling with the understanding of new concepts in a two-way exchange with a *buddy*. In most classrooms, typically only one or two learners are ever required to articulate their thinking orally, and this usually takes the form of giving an answer in English.

This approach seeks to counter tendencies to learn new words, terminology and definitions by rote with the minimum of cognitive processing. It develops oral language skills in both languages and the ability to move

easily between them. It sharpens the task focus and breaks the passive nature of teacher-centred classrooms that still exhibit the Bantu-education pattern and culture of rote learning.

#### **4.1.3. Conceptual and research basis of MB Learner-Talk**

Both the use of peer interaction (via learner buddies) and the use of verbalisation or *linguaging* for promoting and deepening the level of thinking are grounded in the work of Vygotsky (12). *Multi-bilingual* verbalisation makes this process available in the HL to all learners and not just those who happen to have the LoLT as their HL. Its application of existing communicative skills to learning, builds on the work of Hornberger (13).

To express ideas in another language requires finding a way without losing meaning. This involves the learner in further analysis of the subject matter which in itself contributes to clearer understanding of the subject as well as greater mastery of both languages (6).

The practicality and the value of using this oral methodology for teaching Numeracy in a low performing and typical South African Foundation Phase classroom was confirmed by the HLP's 2007 study (2). Its successful use in the teaching of Grade 11 Mathematics has also been demonstrated (9).

## **4.2 A multi-bilingual text and task-based reading methodology for use across the curriculum from Grade 1 to Grade 12. (This is abbreviated as "MB text-for-task".)**

We currently have a vicious cycle of poor reading levels leading to complex text being avoided by both teacher and learner. Teachers see themselves as transmitters of oral information and suppliers of simplified notes or worksheets. The need for learners to engage with text requiring higher-order language and reading skills in order to develop such skills, is poorly understood.

*MB text-for-task* is the second of our proposed methodologies and it builds on the methodology already described of *using talk in your own language to help you think*. It is also used in relation to specific tasks in all subjects across the curriculum.

Oral activity can go only so far in activating and facilitating thinking. Thinking for learning also needs to be generated by text-based, printed or electronic information of various kinds. Initial thinking needs the sharpening, extension and recording made possible by writing and further access to text. Learning therefore needs to be anchored in text and the learners' own writing.

### **4.2.1 What does MB text-for-task involve?**

Learners are given core subject text in both languages in parallel-language format to apply to a task. They are taught the importance of *check reading* as a basic element of any kind of reading-for-task and, where two versions are provided, to read the HL first and then to *check-read* in the common language. This brings two languages into reading and interpretation. The result is increased engagement with the text plus the benefit of having to integrate two versions of the same subject matter into a coherent whole. Languages can never be translated literally and each brings with it other nuances and allusions to add up to a more complete whole. It also leads to a healthy criticism of the language used by textbook writers and a reassessment of how words are used differently in different contexts and possibly even the coining of better words.

The way this approach was used in teaching Grade 3 Numeracy, with children whose reading was seriously below standard in both languages, is described in the HLP's 2007 study (2).

#### **4.2.2 The purpose of MB text-for-task**

The aim is to teach learners how to engage with subject text of all kinds (printed and electronic) and to read bilingually and critically. This allows them to access information independently of the teacher while developing language skills in the process.

English-only text lies right at the heart of many of our ongoing educational difficulties. From Grade 4 onwards, the majority of learners battle to cope without the teacher's assistance in translating and interpreting English text. This is perpetuated throughout their school lives and presents universities with two overwhelming problems: a pathological learner dependence on teachers for pre-digested information and an associated lack of the higher-order language and reading skills vital to academic success.

#### **4.2.3 Conceptual basis of MB text-for-task**

This methodology is rooted in the methods of Lunzer and Gardner, the proponents of *Directed Activities Related to Text* (DART) methodology (14). They design language lessons around subject text specifically to teach reading and language skills while engaging learners with subject content. It also builds on Snow and Brinton's work on integrating language and content (15) and goes back to some of the principles of task-based language teaching tested in the Bangalore studies during the 1980's (16).

The value, practicality and cost-effectiveness of *MB text-for-task* in teaching numeracy in a large, multilingual and underperforming South African classroom were confirmed by the HLP's 2007 study (2). It was also successfully used in several other classes in the same school between 2006 and 2010 that were not a part of this study. As many languages can be used as there are pairs of same-language learners with appropriate parallel text. Even unofficial languages can be served if their cultural organisations can be persuaded to assist with the necessary materials.

#### **4.2.4 Extra resources for MB text-for-task**

Access to the necessary text resources may seem problematic, but in fact basic *multi-bilingual* materials are already available for the Foundation Phase at least.

Parallel-Language materials do not require double the number of books or double the costs. The two text versions share one set of illustrations and the same cover. Or two *language buddies* with the material in English can share an e-tablet loaded with the necessary HL.

A core set of textbooks should ultimately be provided in parallel-language form across the curriculum from Grades 1 to 12. This means an additional set of translation costs (in the short term), but these need to be weighed against substantial benefits and seen in the light of the new electronic options with a *multi-bilingual* dimension. Translation work is a long-term investment.

### **4.3 A multi-bilingual methodology for teaching basic reading skills in the Foundation Phase. (Abbreviated as "MB early reading".)**

This is the third of our set of *multi-bilingual* methodologies. It applies the principles of the first two but focuses them specifically on the needs of the beginner reader.

Whatever method is chosen for teaching children to read, the basic skills to be learnt include relating text symbols to sounds, decoding words, recognising words, using visual cues and then finding meaning in words set in the structure of the language concerned.

The central problem for learners being taught to read in a second language is that after de-coding or word recognition, if their vocabulary or grasp of structure or idiom in this language is inadequate, they flounder with deeper-level meaning. Where the words (and all their associations) are not part of their existing knowledge base, what should be an immediate, stimulating, self-reinforcing process becomes a dreary uphill grind. Even once the basic skills have been tentatively established, literacy development easily stalls at this point. It does not shift into the kind of self-reinforcing gear needed for accelerative learning. Learners who stall at this stage may never really get going.

It is difficult enough for those who do not have either books in their homes or adequate text resources in their schools, the added social problems common in underperforming areas can make learning to read formidable. On top of this, most learners in 2012 are faced with a plethora of competing entertainment distractions, so it is imperative to make the initial launch of reading as easy as possible.

#### ***4.3.1 What does MB early reading involve?***

It proposes teaching reading in two languages at the same time, using the HL as a stepping stone into the reading of both (17). It systematically links text in the HL to parallel text in the second language. At first, only pictures and very simple speech bubbles are used. Then after acquiring the meaning in the familiar HL, learners look at the parallel text versions together and relate the words and phrases of the two languages. This starts the process of teaching the vocabulary, structure and idiom of the second language while reinforcing basic reading skills in both. Besides parallel-language readers, parallel phonics charts and personal dictionaries are also used.

#### ***4.3.2 What does the new curriculum (CAPS) say?***

CAPS also departs from the traditional approach of starting to teach reading in a second language only once the basic skills have been established in the HL. Teachers are now expected to start second-language reading from the second half of Grade 1. They are instructed to clarify the differences between the phonics and sentence structures of the HL and the second language. They must ensure that the “*basic oral competence in the (second Language) and... the basics of reading in the HL (i.e.) knowledge of the HL initial sounds and a basic sight vocabulary (are in place)*”. Meanwhile the reality is that English and African Languages are very different and virtually none of the learners has either of these sets of basics in place at this stage. Moreover, whereas teachers in rural KZN and the Eastern Cape might be reasonably proficient in both languages, in urban Gauteng this is a mystifying and impossible demand, unless teachers have some good multilingual techniques to assist them.

#### ***4.3.3 Weaknesses addressed by MB early reading***

Apart from assisting teachers to demystify the above problem, it can start the process of helping learners begin to understand the 90-95% vocabulary in the second language (FAL) that CAPS already expects of them. It can also go a long way towards addressing other aspects of bad practice embedded in our system (18), such as:

- excessive reliance on high-frequency sight vocabulary
- excessive time being spent on teaching the meaning of words before reading, when the words could be better taught within the context of the sentences
- learners stuck trying to master boring simple text
- late introduction of the kind of skills needed for higher-order reading (19)

An early bilingual approach to reading even has merit in genuinely monolingual parts of the country, as PRAESA is demonstrating in the 3Rs schools in the Western Cape (20). The earlier we can get going with reading in a second language, the earlier we can also start using *MB text-for-task* in subject teaching.

#### **4.3.4 Research evidence to support MB early reading**

The HLP's evidence of success with this methodology is still only at the level of observation. It needs to be subjected to the kind of systematic research which has been proposed as an element in a study currently being undertaken by a consortium of researchers from the HSRC, UP and UL led by Cas Prinsloo of the HSRC. It will look closely at neuro- and psycho-linguistic aspects of learning to read using *multi-bilingual* techniques and it will compare learner progress in similar situations using different techniques.

#### **4.3.5 Extra resources needed for MB early reading**

“Approved” parallel-language readers already exist in all official HLs. Multiple-copy numbers can be kept constant by having parallel versions printed in the same book or by requiring a learner pair to share an e-tablet for the second version. Parallel-language phonics charts are available which could be made accessible to all electronically with the support of government or PanSALB.

A number of cost-effective options are also available for the provision of adequate multilingual library services for the kind of extended reading essential for literacy development, especially if the scope and need for linking school reading programmes to community development are pursued.

Extra teachers of HL reading are a different matter. In most situations the Foundation Phase class teacher can handle the teaching of bilingual reading alone or in conjunction with a language subject teacher on the existing staff. However, complex multilingual situations with a range of HLs will require extra teacher support and possibly even volunteers from cultural organisations or local community groups. This is viable, as shown by the CLING projects in the 3Rs study.

The HLP has shown schools how to go it alone with cost-effective sharing of HL reading teachers among schools in the same area and using community volunteers. But a sustainable long-term approach needs education departments, in conjunction with the Department of Social Development, to play their part.

### **5. Research and Development for *multi-bilingualism***

The lack of Research and Development for innovation in education is in itself an issue. The development of new methodologies and techniques requires testing at every stage before they can be introduced more widely. Teachers can make a valuable contribution to this process through action research in their own classrooms and should be encouraged to do so, but they need to be guided, coordinated and supported by a body suitably qualified and funded. The work done so far with *multi-bilingualism* has implications for education in the whole of Africa and is far too important to be left to a parent-initiated donor-dependent NGO.

### **6. In conclusion...**

The importance of building the self image of the child and the potential for *multi-bilingualism* in this respect should also not be underestimated in overcoming disadvantage in education. Connections need to be made with organisations such as REPSSI with its focus on psychosocial support across Southern and Central Africa.

Through its contribution to overcoming inequality in education a *multi-bilingual* approach can contribute significantly towards the creation of a more equal society in South Africa.

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## Acronymes

ANAs	Annual National Assessments
CAPS	Curriculum and Assessment Policy Statement
CLING	Community literacy and numeracy group
FAL	First Additional Language
HL	Home Language
HLP	Home Language Project
HSRC	Human Sciences Research Council
LoLT	Language of Learning and Teaching
L1	First language
L2	Second language
UP	University of Pretoria
UL	University of Limpopo
PRAESA	Project for the Study of Alternative Education in South Africa
PIRLS	Progress in International Reading Literacy Study
REPSSI	Regional Psychosocial Support Initiative
SAL	Second Additional Language
TIMSS	Trends in International Maths and Science Study

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