

Let's Make Way for African Languages and Culture at School

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Summary

This article examines the impact of the plurilingual approaches of the Basic education quality program (Programme pour la qualité de l'éducation de base – ProQEB) in Chad – bilingual education in national languages and openness to languages – compared with a monolingual approach. These approaches strengthen pupils' cultural identity, improve their academic results, and offer an education that is better adapted to their multilingual reality.

Keywords

Bi-plurilingual education
 Culture
 Inclusive education
 Identity

Introduction

In African society, children are deeply anchored in their culture thanks to rituals and practices where words, objects and actions play a fundamental role. The 'Mân dee' ritual, described in the first section, illustrates how the identity of the child is built through interactions, helping them find their place in society. However, their first steps at school often create a rupture with the initial identity: monolingualism, often imposed in a foreign language, distances the child from their linguistic and cultural reference points, compromising their success in learning. This gap leads to serious consequences, such as failing their classes, high drop-out rates and a feeling of marginalisation among pupils (World Bank, 2021). High failure rates in end-of-cycle exams, particularly in languages of instruction and in mathematics (Noyau, 2006; Noyau, 2014), show the limits of this monolingual approach to education. The examinations were even described by the Deputy Minister for Higher Education as 'weapons of mass destruction' aimed at African youth (Dakaractu, 2019).

Faced with this situation, it is essential to redefine the role of the school, not only as a place to disseminate knowledge, but also as a place to express a plural identity. Plurilingual approaches offer a promising alternative, allowing the child to maintain a link with their native culture while opening to other horizons, for a more inclusive and meaningful education.

This article explores two plurilingual approaches of the Basic education quality program (Programme pour la qualité de l'éducation de base – ProQEB) in Chad, implemented by Enfants du Monde, with the support of Swiss Agency for Development and Cooperation (SDC) and the French Development Agency: Instruction in a National Language (ILN) and an open approach to languages, multilingual education (MLE). The ILN approach proposes bilingual learning, whereas the MLE approach sensitizes students to plurilingualism while conserving the official language of the nation as the main language of instruction. Although their impacts on educational results differ, these two approaches aim to reinforce the connection between the child and their cultural and linguistic roots, all while widening their world view.

Education and Cultural Heritage: Reinventing School

In Chad, where over one hundred languages and cultures co-exist, linguistic and cultural integration in education are essential. Children are seen as a great family asset. In the Mbaye culture, for example, the ‘Mân dee’ ritual honours a deceased ancestor to ensure the survival and protection of newborn babies.

The ritual consists of offering the newborn baby symbolic objects linked to the tastes of the ancestor, such as special clothing, bracelets, a walking stick, or mats made of reeds. These carefully chosen objects are presented to the child during a sacred ceremony where the grandfather, or the paternal aunt or uncle invokes the protection of the ancestor. The designated person takes the child in their arms, says the name of the ancestor, and presents each object while singing their praises and recounting their exploits. These incantations reinforce the spiritual link between the child and their lineage, symbolised by the wearing of these objects for three days for boys and four for girls.

Deeply rooted in the Mbaye culture, the ‘Mân dee’ illustrates how Chadian communities anchor the cultural and spiritual identity of the child from birth. Through rituals such as this, the child is solidly linked to their ancestors and endowed with an identity that puts their roots first.

How could schooling take inspiration from this model by integrating local cultural languages and practices into teaching? ProQEB strives to meet this challenge in two ways: 1) by integrating the languages of the students into learning; 2) by contextualising school knowledge within local knowledge and everyday practices.

Two Languages are Better than one When It comes to Learning at School

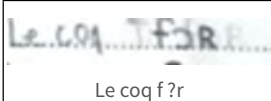


In Chad, learning to read and write in primary schools is often based on memorising letters and mastering their writing, repetitive and mechanical activities that are disconnected from their real meaning. This approach focused on the alphabet and grammar, to the detriment of communication and the production of varied texts, limits pupils’ understanding, not only of language, but also of other subjects such as mathematics.

In schools in the provinces participating in ProQEB, reading and writing take on a more significant dimension. Here, students explore the production of a variety of texts, giving real meaning to their learning. They are encouraged to produce written material based on their everyday lives, thereby reinforcing the complementary nature of reading and writing from the start of their schooling.

The LOLT approach promotes biliteracy by integrating the two languages into all subjects. Pupils learn to read and write simultaneously in Sar (national language) and French (official language) from the first year, gradually discovering the two writing systems through the study of traditional Chadian tales available in both languages. The study by Ndoubalo (2019) shows how this approach enables pupils to compose words, write their names and create short texts using both languages. Analyses of their writing reveal linguistic transfers, such as the use of Sar letters or sounds in French words, demonstrating that bilingual pupils mobilise their first language to overcome difficulties in French. This strategy is not available to students in a monolingual system.

The examples below (Table 1) show how each language enriches the other in a communicative task. By being free to express themselves according to their knowledge and thinking, the pupils transfer and combine skills from one language to the other to produce meaningful writing related to Chadian tales and stories.

Table 1. Analysis of students’ productions

 Le coq f?r	« le coq fort »	The grapheme <i>ɔ</i> represents a sound in Sar
 gars o?	« garçon »	The French sound /on/ is equivalent to the Sar sound /o/
 Un jour, suu décide	« un jour Sou décide »	The French sound /ou/ is replaced by the /u/ in Sar; in this case, it is a long vowel /uu/

Source: Ndoubalo (2019)

Nodjigoto (2019) highlights this phenomenon in natural science assessments: children effectively mobilise their multilingual skills to answer questions and express their knowledge on familiar subjects, such as animal diseases during transhumance. By alternating between languages in their answers, they reveal not only their rich linguistic repertoire, but also the link between the content taught and their daily lives, which gives meaning to their learning.

In a monolingual system, this ability to navigate between languages and to relate the knowledge learned in school to their lived experience would be severely restricted, forcing students to conform strictly to a single official language of instruction.

Ethnomathematics and Languages: Reconciling calculations and Cultural Practices

In the early years in primary schools in Chad, arithmetic is taught mainly through the decimal numbering system, writing numbers as digits and operations. In the second year of primary school (CP2), pupils learn the value of coins in French and practise solving mathematical problems. For example, the official Étoile textbook (CNC, 2012, p.73) suggests the following situation: a mother gives her two children 70 francs, which she divides into coins of 25 francs and 10 francs. The pupils must answer in French, indicating the amounts received by each.

The monetary values and arithmetic operations carried out in Chadian languages do not correspond directly to the values in French. For example, there is an equivalence of 1 to 5 between the monetary value in Chadian languages and that in French: '100 francs' in French becomes 'gursu 20' in Sar or '20 riyal' in Chadian Arabic (5 francs = gursu 1 = 1 riyal). This disparity raises an important question: how can schools help children navigate between these different linguistic and numerical systems, while valuing their cultural practices and everyday experiences?

In schools using the MLE and ILN approaches, pupils learn to convert amounts in a Chadian language into their equivalent in French and vice versa by using division or multiplication by 5. Concrete activities, such as calculating amounts based on the coins available, encourage them to answer questions such as 'What is the total price of a purchase, expressed in French and in your Chadian language', thus preparing them for everyday life. For example, the CP2 mathematics sequence 'Les échanges au marché' (Exchanges at the market) features a dialogue in French between a customer and a seller: the customer asks for the price of a bundle of garlic and a bundle of onions, the trader replies 550 and 300 francs, then the customer asks for the total to be paid. The pupils calculate this sum in French and in their local languages (ProQEB, 2019, pp. 64-80).

Another example of this connection between mathematics and experience concerns the numbering systems in Chadian languages. Children grow up learning numbers in their first languages, which have different logics: in Sara-kaba, the number seven is expressed as 'mitikidjo' ('five and two'), while in Gday it is expressed as 'biyam-ta' ('there are three missing to make ten'). French, for its part, uses a base of groupings by tens, but this rule is not followed for certain numbers: for example, 80 and 90 are expressed as multiples of twenty (four-twenties [quatre-vingts; 4×20] and four-twenties-ten [quatre-vingt-dix; $4 \times 20 + 10$]). In Sara-kaba, they are based on thirties: 'koh djo bi djoké' for 80 ($30 \times 2 + 20$) and 'koh mouta' for 90 (30×3).

The conceptual diversity of Chadian languages, with their own mathematical logic, raises questions about the integration of this linguistic wealth in schools. The MLE and ILN approaches build on these experiences by using local languages to contextualise the mathematical concepts taught in French, thereby enhancing pupils' understanding and grounding their learning in their everyday reality.

Comparison of Educational Approaches

The data from the skills assessment conducted in Chad (Nidegger, 2022) confirm the effectiveness of the bi-plurilingual approaches compared with the monolingual approach, and demonstrate the superiority of the ILN approach over the MLE approach (Table 2).

These results lead to two key observations:

1. Bi-plurilingual approaches are particularly effective when they integrate a contextualisation of school knowledge via culturally relevant practices (Figure 1).
2. Children who learn to read and write simultaneously in two languages (Figure 2) develop greater linguistic and cognitive flexibility than their peers in monolingual or language-aware education.

Table 2. Average percentage success in CP2 in language and mathematics according to the sub-domains tested and the types of school.

	Language		Mathematics		
	Decoding and Reading Comprehension	Entry into producing writing	Numeration	Arithmetic	Geometry
AOL	46%	52%	70%	64%	60%
ELN	55%	62%	78%	78%	78%
Monolingual	45%	44%	59%	57%	54%

Source: Nidegger (2022).

Figure 1. Images of children in bilingual schools.
Writing the words cat, chicken, and crocodile after reading an African tale.



Source: Enfants du Monde image bank

Figure 2. Images of children in bilingual schools.
Writing the value of money in French and another African language.



Source: Enfants du Monde image bank

Conclusion

A culturally appropriate bi-plurilingual education enables students to strengthen their academic skills while celebrating their multiple identifications, thus facilitating their personal development and social integration.

Conversely, restricting the use of heritage languages in schools limits the expression of children's knowledge, experiences, and perspectives on important global issues. Promoting the use of local languages in the educational context enriches the school environment, providing a platform for a diversity of voices and knowledge to address the complex challenges of today's world. This approach also highlights the need to rethink teacher training, curricula, and assessments to incorporate these essential elements.

References

- Centre National des Curricula [CNC]. (2012). *Étoile en mathématiques, CP2, Manuel de l'élève*. N'Djamena : Ministry of Primary Education and Civic Education.
- (2019). Moustapha Guirassy : « Le Baccalauréat est une arme de destruction massive de notre jeunesse. Il doit être supprimé ». *DakarActu*. 8 December 2019. https://www.dakaractu.com/Moustapha-Guirassy-%C2%A0Le-Baccalaureat-est-une-arme-de-destruction-massive-de-notre-jeunesse-Il-doit-etre-supprime%C2%A0_a180674.html
- Nidegger, C. (2022). *ProQEB : Rapport final de l'évaluation des connaissances et compétences des élèves*. N'Djamena, Chad.
- Ndoubalo, B. (2019). *Le développement de l'écrit en deux langues (Sar-Français) chez les enfants de l'expérience école en langue nationale au Moyen-Chari, Tchad* (Master's dissertation). Abomey-Calavi University, Benin.
- Nodjigoto, I. (2019). *Dispositif d'évaluation formative des apprentissages dans les écoles bilingues (Sar-Français) du Moyen-Chari : États de lieux, enjeux et perspectives* (Master's dissertation). Abomey-Calavi University, Benin.
- Noyau, C. (2014). Construction de connaissances en L1 et en L2 : Les transferts de connaissances en sciences d'observation. *Recherches Africaines*, (14), 169–198.
- Noyau, C. (2006). Linguistique acquisitionnelle et intervention sur les apprentissages : Appropriation de la langue seconde et construction des connaissances à l'école de base en situation diglossique. *Bulletin VALS-ASLA*, 83(1), 93–106.
- ProQEB. (2019). *Séquence didactique disciplinaire mathématiques : Les échanges au marché*. Geneva: Enfants du Monde.
- World Bank. (2021). *Loud and Clear: Effective Language of Instruction Policies for Learning* (World Bank policy approach document).