IMPACTS OF CURRICULUM INTEGRATED WITH MULTILINGUALISM AND LOCAL CONTEXTS ON STUDENT LEARNING OUTCOMES IN BURUNDIAN ELEMENTARY SCHOOLS

Augustin Ndizeyimana & M. Balasubramaniam

Abstract

This study will investigate the impacts of a curriculum that integrates multilingualism and local contextual knowledge on the pupils of primary school at an early age in Burundian elementary schools, who are not mature enough to determine how to differentiate between different languages, and the study will also deal with knowing how are their academic outcomes. Based on the multilingualism integrated in the elementary school from the lower level of elementary school, this study will explore how the integration of French, English, Kiswahili, and Kirundi is managed by the learner and their outcomes. Using a survey research design, data will be collected from teachers, students, and the school leaders from Bujumbura province. To gather data, the structured questionnaire will be employed, using Google Forms, and will be analyzed by suitable statistical analysis. The expected findings are that the students and teachers are exposed to a multilingual context in their teaching and learning that they don't understand well, and the responsive curricula can bridge cultural gaps in early grade achievement. The study recommends that the government of Burundi first encourage the professional development of teachers by focusing on language learning.

Keywords: Multilingual education, Local context, curriculum integration

Introduction

Effective education systems require well-organized curricula that respond to local community needs. Many countries face challenges such as limited funding, teacher shortages, overcrowded classes, and low learning outcomes. Most colonized countries face the

challenges of integrating multilingualism into the curriculum, which in most cases becomes hard to integrate into the curriculum. It needs effort, updates, and a serious alignment with their local context that brings effective results after implementation. In Burundi, the influence of the native language Kirundi becomes a barrier to the mastery of foreign languages, such as English, French, and Kiswahili, in Burundian elementary schools.

Statement of the Problem

Since the 2005-2006 school year, the government of Burundi, through the Ministry of National Education and Scientific Research, has implemented a reform for enhancing languages (French, English, and Kiswahili) starting from the lower level of primary schools. However, despite government initiatives, pupils still struggle with French, English, and Kiswahili by performing below national standards. The reason can be related to insufficient professional development for teachers and the fact that language mismatches limit comprehension, participation, and learning progress. The curriculum also lacks strong links to learners' cultural and community experiences. Limited local research leaves educators uncertain about the impact of multilingual and culturally relevant curricula.

Objectives

1. To find out the impact of a curriculum integrated with multilingualism on students' learning outcomes in elementary school in Burundi.
2. To examine the impact of local contexts on the students' learning outcomes in elementary schools in Burundi
3. To compare the impact of Curriculum integration with multilingualism and local contexts on students' learning outcomes.

Hypotheses

$H_0$1: There is no significant impact of a curriculum integrated with multilingualism on students' learning outcomes in elementary school in Burundi.

$H_0$2: There is no significant impact of local contexts on the students' learning outcomes in elementary schools in Burundi

$H_0$3: There is no statistically significant difference in the impact of Curriculum integration with multilingualism and local contexts on students' learning outcomes.

Methodology

As the study aims to investigate the effect of a curriculum that integrates multilingual instruction and local context on learning outcomes of elementary school pupils in Burundi, it employs a survey research design. Data were collected from elementary teachers, pupils, and the school leaders in Bujumbura province, comprising a total sample of 499 respondents. The sampling technique was purposive. To gather data, the structured questionnaire was employed using Google Forms and analyzed by suitable statistical analyses.

Literature Review

Abroad Studies

UNESCO (2024). Title: Language Matters: Global Guidance on Multilingual Education. Objectives: Advocate multilingual education as a human right for inclusive, equitable, quality learning. Guide policymakers on integrating learners' home languages to drive systemic educational change. Methodology: Because this is a UNESCO policy guidance report rather than a conventional empirical research article, it does not use a typical empirical methodology with sampling. His sampling techniques are not provided in this paper on language matters. The findings of his study revealed that the learning outcomes are limited because many learners from different educational institutions are taught in unfamiliar languages different from their mother tongues, while this plays a vital role in educational settings. To him, learners'success requires many initiatives such as supportive policy, trained teachers, local materials, and community engagement.

Fitzsimons, S., et al. (2020). Title: Context Matters: Adaptation Guidance for Developing a Local Curriculum from an International Curriculum Framework.some objectives provided are the following: to examine the practical guidance for curriculum framework in local curricula, to explore the importance of cultural, linguistic, and social context, and to highlight broader curriculum development lessons with local realities. The study has employed a descriptive approach. Sample/sampling techniques: No sampling techniques were provided for this study. The findings of the study highlighted that the curriculum will be effective when it requires deep sensitivity to local sociocultural, linguistic, and educational contexts rather than uniform application of international frameworks. The second finding revealed that curriculum is meaningful when its content aligns with local priorities, local languages, local pedagogies, indigenous knowledge, and practical constraints like teacher capacity and resources.

Trudell & Piper (2019). Title of the study: The effect of language of instruction on literacy and learning outcomes in East Africa. Some objectives of the study were: To assess how different languages of instruction shape elementary students' literacy, comprehension, and overall learning in East Africa. Examine how national and regional policies about the languages used for teaching in different classrooms of elementary school are implemented

and how alignment influences student achievement. The methodology provided by the investigator of the study is inferred from the literature because the full paper text itself is not open-access. The sample and sampling techniques of the study: The article's exact sample sizes and sampling methods are not publicly available due to subscription access. The findings revealed that the students learn literacy skills more effectively when taught in languages they understand. It also revealed that it is possible for the teachers and their learners to make a gradual transition from familiar languages to official languages, which improves reading and academic outcomes. And finally, results have revealed that the language of instruction in education plays a crucial role because it influences students' engagement, confidence, and educational success.

Burundian Studies

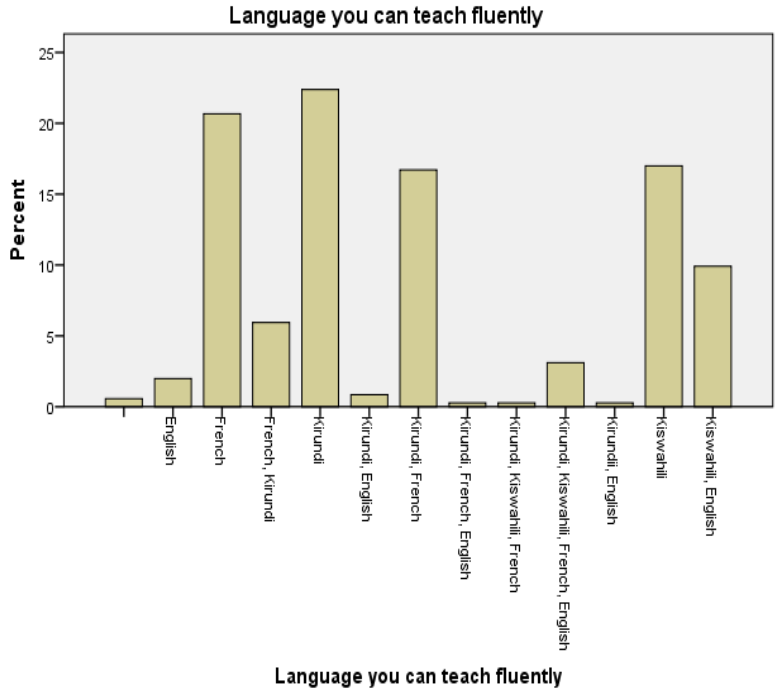
Nsengiyunva et al (2022). The title of the study is all about the issues in multilingual education in Burundi: The 'old' multilingual education system. Objectives: Trace the historical development of multilingual education in Burundi.to explore the effect of curriculum on students' learning outcomes. Examine policymakers' beliefs about multilingual competence and language interaction. Methodology: Qualitative document and content analysis of policy-produced curriculum materials and academic literature. Interpretation of policymakers' beliefs and goals through triangulation to reconstruct the historical multilingual education system. Sample/sampling techniques: Purposive selection of policy and curriculum documents on the former language education system. Documentary and literature-based analysis without human participants. The findings revealed that the Burundian education system recognized different challenges to shift from monolingualism to multilingualism due to the influence of the native language, Kirundi, which becomes a challenge to the mastery of other languages

UNICEF (2017). Title: The Impact of Language Policy and Practice on Children's Learning. Objectives: Examine Burundi's current multilingual education policy and classroom language use across primary grades and its impact on learning and cognitive load. The methodology of the study is all about qualitative and descriptive synthesis. The study analyzed the national policy documents, curricula, and academic literature. About the sample and sampling techniques, there was no direct participant sampling, nor was a classroom survey conducted. The findings revealed that early-grade multilingualism creates high cognitive load and teacher strain. The findings revealed a transition taking place from Kirundi to other languages, French, English, and Kiswahili.

Scope of the Study

The research examines government elementary schools found in the province of Bujumbura. The focus is on the primary school from P1 to P9 (Primary 1 to Primary 9).

Analysis and Interpretation of Data



The chart displays the **percentage distribution of languages used by the teacher in his class. The languages** include 4 languages such as Kirundi, Kiswahili, French, and English. Kirundi (≈**22–23%),** French (≈**21%).Kiswahili alone**and **French–English (16–17%)**, Kiswahili-English (10%), French-Kirundi (6%), Kikundi–Kiswahili–French–English **(below 5%),** English (1-2%).

$H_0$1: There is no significant impact of a curriculum integrated with multilingualism on students' learning outcomes in elementary school in Burundi.

Table 3.1 Model Summary

Model	R	R Square	Adjusted R-Square	Std. Error of the Estimate
1	.153	.024	.021	1.01653

a. Predictors: (Constant), CIM

The table indicates the regression model, where curriculum integrated with multilingualism (CIM) accounts for 2.4% of the variance in students' learning outcomes (SLO) (R-Square=0.024, Adjusted R-Square=0.021). The model is statistically significant, but with a weak impact of curriculum integrated with multilingualism (CIM) on students' learning (SLO) in elementary schools in Burundi.

Table 3.2 ANOVA

Model		Sum Squares	df	Mean Square	F	Sig.
1	Regression	8.699	1	8.699	8.419	.004
	Residual	360.631	349	1.033		
	Total	**369.330**	**350**			

a. Dependent factor: SLO

b. Predictors: (Constant), CIM

The chart is about ANOVA, where its results show an F of 8.419 and a p of 0.004 (P<0.05). This confirms the significance of the regression model. The regression Sum Squares (8.699) compared to the residual Sum of Squares (360.631) indicates the variation in students' learning outcomes. These results prove**empirical evidence** that a curriculum integrated with multilingualism **significantly influences students' learning outcomes** in elementary schools in Burundi. The null hypothesis is thus rejected.

Table 3.3 Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1						
	(Constant)	2.413	.264		9.125	.000
	CIM	.561	.193	.153	2.902	.004

a. Dependent variable: SLO

This table of coefficients reveals that the P-value is less than .001 (P<.001), which represents the expected level of students' learning outcomes (SLO) when the curriculum integrated with multilingualism (CIM) is held at zero**. (β = 0.153, and the p-value =.004)** indicate a positive impact of curriculum integrated with multilingualism (CIM), but an impact which moderate or weak, as the model summary confirmed it. Since the *t*-value for CIM is **2.902**, and the associated significance level is **p = .004,** which is less than the conventional alpha level of.05, This indicates that the effect of CIM on students' learning outcomes is **statistically significant.** Hence, the hypothesis is rejected.

$H_0$2: There is no significant impact of local contexts on the students' learning outcomes in elementary schools in Burundi

Table 3.4 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	.958	.917	.917	.29594	

a. Predictors: (Constant), ILC

The regression model accounts for 91.7% of the variation in the students' learning outcomes (R-squared = 0.917, Adjusted R-squared = 0.917). R-squared is equal to Adjusted R-squared; this justifies a stable model that is not inflated by the local context found in elementary schools in Burundi. Based on the results, the hypothesis is strongly rejected.

Table 3.5 ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	338.766	1	338.766	3868.127	.000
	Residual	30.565	349	.088		
	Total	**369.330**	**350**			

a. Dependent Variable: SLO

b. Predictors: (Constant), ILC

The ANOVA results show an F-statistic of 3868.127 and a p-value of 0.000 (P<0.001). These results confirm the significance of the regression model. The regression Sum Squares (338.766) compared to the residual Sum of Squares (30.565), the regression Sum is much larger than the residual Sum, which indicates a variation in students' learning outcomes. This means that the local contexts statistically have a strong impact on students 'learning outcomes in elementary schools in Burundi. The results in the chart lead to the rejection of the null hypothesis as well.

Table 3.6 Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1						
	(Constant)	.105	.052		2.037	.042
	CIM	.968	.016	.958	62.194	.000

a. Dependent variable: SLO

Table 3.6 shows a standardized coefficient **(β = 0.958), t-value = 62.194, p < .001. The Unstandardized coefficient (B = 0.968)** indicates that for every one-unit increase in local context factors, students' learning outcomes increase by **0.968 units,** holding other factors constant. This confirms a **strong positive effect of the local contexts on students 'learning outcomes. However, there is a rejection of the null hypothesis in this case.**

$H_0$3: There is no statistically significant difference in the impact of Curriculum integration with multilingualism and local contexts on students' learning outcomes

Table 3.7 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	.958	.917	.917	.29635	

a. Predictors: (Constant), CIM, ILC

The table indicates the strong and positive relationship between the curriculum integrated with multilingualism and the integration of local contexts and students' learning outcomes. The curriculum integrated with multilingualism accounts for **91.7%**of the variance in students' learning outcomes (The value of **R-Square = 0.917,** The **Adjusted R Square = 0.917**). Therefore**, the null hypothesis about no statistical significant difference in the impact of curriculum integration with multilingualism and local contexts on students' learning outcomes is not supported by the model summary.** Instead, the results provided prove that these factors play a **major and meaningful role** in influencing students' learning outcomes.

Table 3.8 ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	338.769	2	169.384	1928.737	.000
	Residual	30.562	348	.088		
	Total	**369.330**	**350**			

a. Dependent Variable: SLO

b. Predictors: (Constant), CIM, ILC

The ANOVA results in this third table indicates an F-statistic of 1928.737and a p-value of 0.000 (P<0.001). The p-value (.000) is **much smaller than the conventional significance level of 0.05,** which means the regression model is statistically significant. These results confirm the significance of the regression model. The regression Sum Squares

(338.769), the residual Sum of Squares **(30.562),** and the **Total Sum of Squares = 369.330.** These results indicate that a very large proportion of the total variance in students' learning outcomes is highlighted by the predictors (CIM and ILC). Since **p < 0.05**, thus, there is a rejection of the null hypothesis in this chart**.**

Table 3.9 Coefficients

Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**
		B	Std. Error	Beta		
1						
	(Constant)	.118	.086		1.378	.169
	CIM	.969	.016	.958	61.306	.000
	ILC	-.011	.057	-.003	-.189	.850

a. Dependent Variables: SLO

Table 3.9 shows a standardized coefficient for the integration with local contexts **(β = 0.958), t-value = 61.306, p < .001. The Unstandardized coefficient (B = 0.969) these results indicate that** ILC has a **strong, positive, and statistically significant effect**on students' learning outcomes.

This indicates that an increase in curriculum integration with local contexts is associated with a substantial improvement in students' learning outcomes.**curriculum integration with multilingualism (β = −0.003), (t = −0.189), (p = .850)**, and **the Unstandardized coefficient (B = −0.011, and this indicates that** CIM has **no statistically significant effect** on students' learning outcomes. The very small coefficient and high p-value indicate that curriculum integration with multilingualism does **not** meaningfully predict students' learning outcomes in this model. Therefore, there was a rejction of the null hypothesis, which proves a statistical significant difference in the impact of the two curriculum integration approaches on students' learning outcomes.

4. Conclusion of the Study

In summary, it can be stated that a curriculum that incorporates multilingualism and local contexts in nations with multiple languages plays a crucial role in language enhancement, beginning within educational environments. In Burundi, the predominant language spoken throughout the nation is Kirundi. The research indicated a slight positive effect of a curriculum that integrates multilingualism on the learning outcomes of elementary school students in Burundi. However, the significant degree of local context integration,

which suggests that the local language both influences and poses challenges to the integration of multilingualism within the curriculum in Burundi, may hinder fluency and advancement in other languages.

References

1. Fitzsimons et al. (2020) highlight that curriculum development must be responsive to local context. Access the study (PDF).
2. Nsengiyumva, D. S. (2022). The 'old' multilingual education system: Cross-linguistic transfer and language proficiency in the Burundian context. (papers).
3. Rahmawati, S., & Prasetyo, A. (2024). Analysis of the effect of local wisdom-based learning modules on student learning outcomes. International Journal of Learning, Teaching and Educational Research, 23(2), 145–160. https://doi.org/10.26803/ijlter.23.2.8
4. Trudell, B., & Piper, B. (2019). The effect of language of instruction on literacy and learning outcomes in East Africa.Read the UNESCO publication page.
5. UNICEF (2017) Language and Children's Learning: Burundi country note (which draws on the LASCOLAF study by Mazunya & Habonimana, 2010), based on the official UNICEF report The Impact of Language Policy and Practice on Children's Learning: Evidence from Eastern and Southern Africa — Burundi profile. Download theBurundi country profile (UNICEF 2017).
6. UNESCO (2024) (in collaboration with International Task Force on Teachers for Education 2030) .Global Report on Teachers: Addressing Teacher Shortages and Transforming the Profession Digital Library+2un-ilibrary.org+2. Publisher and date: UNESCO, Paris, 2024. Read / download the report (UN iLibrary). View via UNESCO page (overview + access)
7. UNESCO. (2025). Languages matter: Global guidance on multilingual education.