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**Overcoming the Barriers to Multilingualism:
Challenges for Teachers in Sub-Saharan Africa in teaching
students who do not have their home language as language of
instruction**

Academic Paper

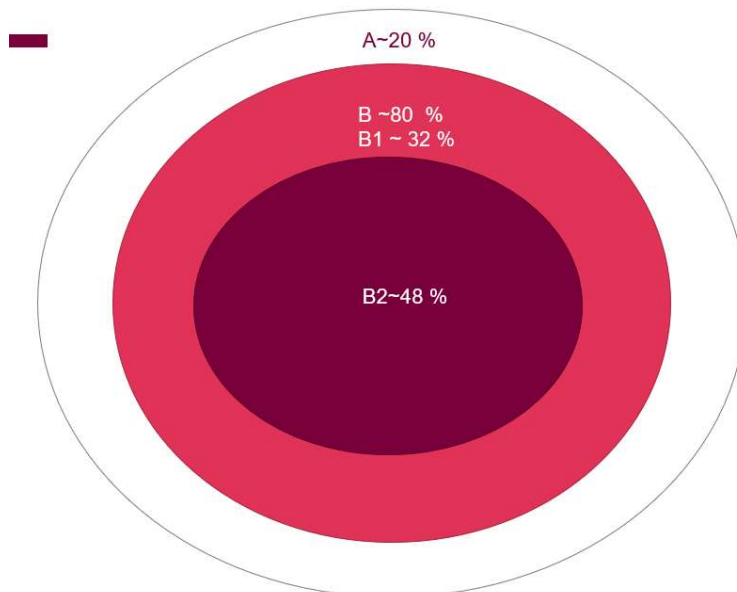
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Summary

This study focuses on the challenges faced by teachers in Sub-Saharan Africa when instructing students whose first or home language differs from the language of instruction. The region is linguistically diverse, with over 2,000 languages spoken, and colonialism has influenced language policies and education systems. Many countries inherited European languages as the official language of instruction, creating difficulties for multilingual students and teachers. Language policies vary across countries, with many using European languages as the medium of instruction in schools. The study aims to contribute to awareness by examining the extent and nature of challenges faced by teachers of Sub Saharan Africa while teaching in multilingual environment.

Main finding of the study is presented in the diagram below: it shows group A - only 20 percent or 1 in 5 students in Sub-Saharan are educated in their first/home language by teachers who know the language proficiently. Named group B is the largest - 80 percent of children in sub-Saharan Africa are taught in languages other than their first language. But one part of this group - B1- is in a more advanced situation, because 32 percent of them are taught by teachers who do have proficient level of the LoI. The most disadvantaged, but significant group, which makes of around half of students, captured by surveys, is most vulnerable regarding the education in their home language. B2 group – 48 percent of Sub Saharan students are instructed in the language which is other than their first/home language and are taught by teachers who either know the LoI insufficiently to teach or are struggling with teaching in LoI.



Santrauka

Šiame tyrime daugiausia dėmesio skiriama iššūkiams, su kuriais susiduria mokytojai Afrikoje į pietus nuo Sacharos, mokydami mokinius, kurių gimtoji kalba skiriasi nuo dėstomosios kalbos. Regionas yra įvairus kalbų požiūriu, jame kalbama daugiau nei 2000 kalbų, o kolonializmas turėjo įtakos kalbos politikai ir švietimo sistemoms. Daugelis šalių paveldėjo Europos kalbas kaip oficialias mokymo kalbas, todėl daugiakalbiams mokiniams ir mokytojams kyla sunkumų. Kalbų politika įvairiose šalyse skiriasi, daugelis naudoja Europos kalbas kaip mokymo kalbas mokyklose. Šiuo tiriamuoju darbu siekiama prisidėti prie informuotumo, nagrinėjant iššūkių, su kuriais susiduria Užsachario Afrikos mokytojai, mokydami daugiakalbėje aplinkoje, mastą ir pobūdį.

Apibendrinant pagrindines tyrimo išvadas, kaip parodyta toliau pateiktoje diagramoje, tik 20 procentų arba 1 iš 5 mokinių (A grupė) Užsachario Afrikos šalyse mokosi savo gimtąja kalba ir yra mokomi mokytojų, kurie gerai moka šią kalbą. Pavadinta B grupė yra didžiausia – 80 procentų vaikų Užsachario Afrikoje mokomi kitomis kalbomis nei gimtoji. Tačiau viena šios grupės dalis – B1 – yra gersnėje situacijoje, nes 32 procentams jų dėsto mokytojai, turintys aukštą kalbos lygį. Labiausiai nepalankioje padėtyje esanti, bet reikšminga grupė, kurią sudaro maždaug pusė mokinių, yra labiausiai pažeidžiama dėl išsilavinimo gimtąja kalba. B2 grupė – 48 procentai tirtų Užsachario Afrikos esančių mokinių yra mokomi kita nei gimtąja kalba, o juos moko mokytojai, kurie nepakankamai išmano oficialią dėstymo kalbą arba jiems sunku dėstyti oficialia kalba.

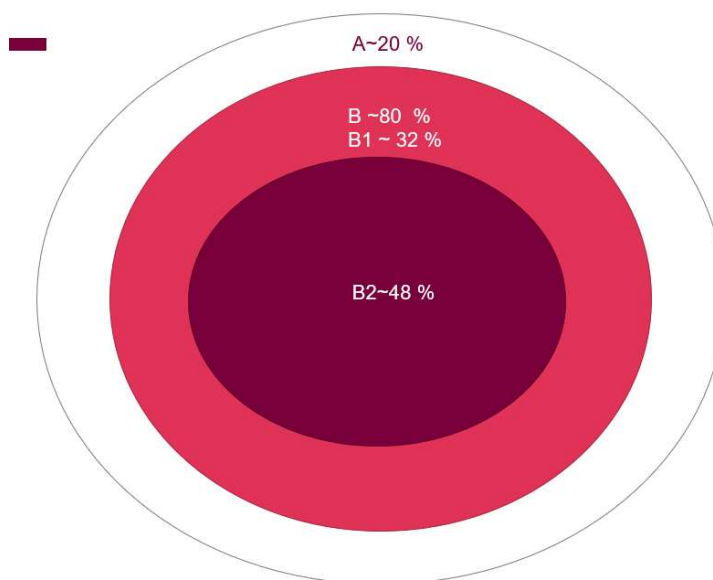


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¹ Loud and Clear: Effective Language of Instruction Policies for Learning, 2021, World Bank, hereafter WB

Abbreviation List

L1 - First language

L2 - Second language

LEP - Limited English Proficiency

LoI - Language of Instruction

NGO - Non-Governmental Organization

OECD - Organisation for Economic Co-operation and Development

PASEC - Programme for the Analysis of Education Systems

SDG - Sustainable Development Goal

TAG - Technical Advisory Group

UIS - UNESCO Institute for Statistics

UNESCO - United Nations Educational, Scientific and Cultural Organization

UNICEF - United Nations Children's Emergency Fund

WB – World Bank

Foreword

Dear readers,

I am pleased to present this paper, which explores the intersection of pedagogy and my passion for the African continent. I chose to study School Pedagogy to honor my family line: both of my parents are Vilnius University alumni – the English philologist and Physics' graduates. My mother Ruta Birziene worked as an English teacher for her entire professional life. She was a teacher who really loved her job and taught students as she said too long - 40 years. My father Sigitas Birzys dreamed of a scientist career, but as Lithuania went through turmoil period from occupation to restoration of independence and most of the systems collapsed, he had to leave laboratory and has taken many jobs to meet family needs. For some period he was a teacher of mathematics and physics. More to that, my grandmother Salomeja Stumbureviciene was a VU graduate and a biologist teacher for most of her professional life. My uncle Rimantas Birzys taught philosophy at Vilnius Gediminas Technical University. My academic journey has been shaped by the influence of my family. From 2017 I teach Vilnius University students the Basics of African and development studies. The region captured my attention during my study years and since it is the geographical area of my study field. I am a development cooperation expert and practitioner with almost 15 years of experience.

The most valuable and, at the same time, challenging part of my School Pedagogy studies was the practice at school. I am very grateful to the leadership of Vilnius International School (VIS) for accepting me, and, in particular, to social sciences teacher Vaidotas Steponavicius for mentoring me so patiently and setting the best example to follow. VIS is a private English school, and the practical experience there was an eye-opener for me. I learned about the learning and community possibilities that children have today during their schooling years. Personally, the takeaway from this experience was the wish that my daughter could have a similar environment to learn and grow. Another takeaway was the realization that a teacher's job is significantly different from working with students at the university level. I discovered that teaching requires extraordinary stamina, wisdom, and personality. I have the utmost respect for those who teach and continue to love their job despite the challenges, including often insufficient financial rewards and a lack of public support.

For this academic paper, I chose a topic that combines the pedagogical theme with my geographical area of interest. Slowly, Lithuanian society is becoming more and more aware of the realities of the African continent, and the interest in development cooperation is also gradually growing.

I hope this paper will contribute a small bit to the general awareness about Africa. I want to express my sincere gratitude to PhD Assistant Professor Daiva Lepaite, who agreed to be my supervisor and provided wise guidance throughout the process. Lastly, but not least, I would like to thank Ieva Raudonytė, an Education Researcher with the UNICEF Innocenti – Global Office of Research and Foresight. Despite the busy times and responsibilities between Vilnius and Paris, she found the energy to support me in my data research and motivation, for which I am truly grateful.

I Introduction

Main concepts of the study

Multilingualism refers to the ability of individuals to use more than one language. In Sub-Saharan Africa, many individuals grow up speaking multiple languages and may switch between them depending on the context. Multilingualism is often seen as a valuable resource, but it can also present challenges for educators who must navigate multiple languages in the classroom.

Language of instruction refers to the language that is used to teach academic subjects in schools. In Sub-Saharan Africa, the language of instruction is often a colonial language, such as English or French, which may not be the first language of many students. This can lead to difficulties in comprehension and hinder academic progress. In order to resolve confusion around which language should be counted as the “language of instruction”, the UNESCO recommends that the term “language of instruction” should be defined as “the language that is used to teach content and other subject areas in school” (UIS, 2018). Interpretation of the term “language of instruction” as indicator 4.5.2 does is fairly simple in cases where only one language is used in class. In bilingual or multilingual classrooms, however, a clearer criterion for identifying the language of instruction is necessary. In this paper for the clarity purposes the language used most frequently in teaching in the classroom be identified as the “language of instruction.”

Home language refers to the language(s) that a person has learned or acquired as a first language in their early childhood. It is the language(s) that the person is most comfortable using in communicating with their family, friends, and community. Home language is also sometimes referred to as mother tongue or first language. In order to measure indicator 4.5.2 in a comparable way across communities and nations, it is important to agree on the meaning of “home language”. Is it the language spoken in the community, or the language spoken at the household level? Which is the “home language,” where more than one language.

Mother tongue education: A form of education where the instruction is primarily conducted in a student's first language or mother tongue. The aim is to support students in developing their literacy and academic skills in their native language before transitioning to additional languages.

Multilingual education refers to an educational approach that recognizes and embraces the linguistic diversity of students. It involves providing instruction in multiple languages, including students' mother tongues and other languages spoken in the community or region, to facilitate their learning and overall development.

Teacher challenges: Difficulties or obstacles faced by teachers in their professional roles. In the context of language of instruction, teacher challenges may include inadequate language proficiency, limited access to appropriate teaching materials, lack of training in multilingual pedagogy, and addressing the diverse needs of students from different language backgrounds.

Sub-Saharan Africa: A region in Africa that lies south of the Sahara Desert. It encompasses multiple countries and is characterized by a rich cultural and linguistic diversity.

Language barrier in education: A situation where students face difficulties in understanding or expressing themselves academically due to differences in language proficiency. Language barriers can hinder effective communication, comprehension, and learning outcomes.

Multilingual classrooms: Classrooms where students from different language backgrounds come together and engage in learning activities in multiple languages. These classrooms aim to promote language diversity, cultural exchange, and the development of multilingual skills among students.

Background and context of the study

Sub-Saharan Africa is a linguistically rich region, with over 2,000 languages spoken. Despite Colonialism has had a lasting impact on the region's language policies and education systems. Many countries in the region inherited European languages as the official language of instruction, and this has had significant implications for students who do not speak the language of instruction at home. The challenges faced by teachers in Sub-Saharan Africa when instructing students who are multilingual are complex and varied. The issue of language and education is closely tied to broader socio-economic and political issues in the region. The legacy of colonialism and globalization has created a situation where European languages are often seen as more prestigious and valuable than local languages.

There are many Sub-Saharan African countries that have more than one official and national language. To note, the official language refers to the language or languages that are recognized and used by the government, administration, and legal system of a country. It is typically the language used in

official documents, government communications, education, and formal settings. On the other hand, the national language refers to the language or languages that are commonly spoken and understood by the majority of the population within a country. In many African countries, there is a distinction between the official language(s) and the national language(s). While the official language(s) may be inherited from colonial times, the national language(s) often include indigenous languages that are spoken by the majority of the population. Full list of languages is added as Annex 1 of this study.

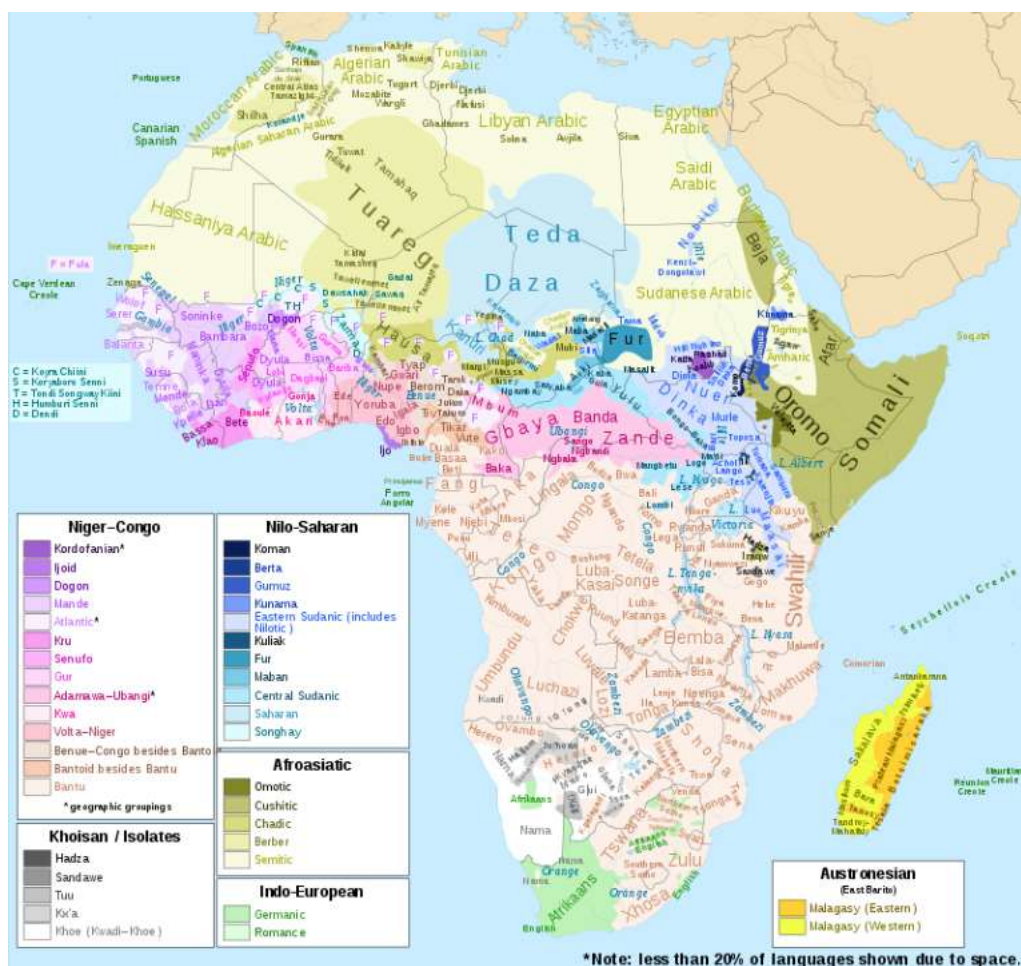
At least thirty-five languages indigenous to South Africa are spoken in the Republic, twelve of which are official languages of South Africa: Ndebele, Pedi, Sotho, Swati, Tsonga, Tswana, Venda, Xhosa, Zulu, Afrikaans, and English, which is the primary language used in parliamentary and state discourse, though all official languages are equal in legal status. South Africa Republic is considered a part of Sub Saharan region, but due to the specific historical circumstances, I particular apartheid regime, which empowered the whites of European descendant, and discriminated the black race locals, South Africa often falls out of the analyses scope of the regime in African Studies. In this study too, South Africa is viewed as a special case, which needs a more thorough analyses, to explain the data on the teachers' challenges in the country as the generalization can not be made without the bigger risks of mistakes.

From Sub – Saharan African countries in this study Burundi case will be analyzed aiming to explore if teacher's have less challenges because of high rates of students who's LoI is their L1 or home language. Ethiopian language policy and implementation practice will be presented in more detail as this country is named as a role model by World Bank.

Surely, it's important to note that the extent to which these languages are officially recognized and used vary from country to country in the rest of the region too, and there may be other regional or minority languages spoken in these countries as well. Each country has its own specific as it has it's unique setting of ethnical composition, socio economic development, political setting and history. However, what it has in common, is the colonial past and complex, yet very important its' consequences for the present.

The total number of languages natively spoken in Africa is variously estimated (depending on the delineation of language vs. dialect) at between 1,250 and 2,100, and by some counts at over 3,000. Nigeria alone has over 500 languages (according to SIL Ethnologue), one of the greatest concentrations of linguistic diversity in the world. The Languages of Africa belong to many distinct language families, among which the largest are: Niger–Congo, which include the large Atlantic-Congo and Bantu branches in West, Central, Southeast and Southern Africa. Afroasiatic languages are spread throughout Western Asia, North Africa, the Horn of Africa and parts of the Sahel. Saharan, Nilotic and Sudanic languages

(previously grouped under the hypothetical Nilo-Saharan macro-family), are present in East Africa and Sahel. Austronesian languages are spoken in Madagascar and parts of the Comoros. Khoe–Kwadi languages are spoken principally in Namibia and Botswana. Indo-European languages are spoken in South Africa and Namibia (Afrikaans, English, German) and are used as lingua francas in Liberia and the former colonies of the United Kingdom (English), former colonies of France and of Belgium (French), former colonies of Portugal (Portuguese), former colonies of Italy (Italian), former colonies of Spain (Spanish) and the current Spanish territories of Ceuta, Melilla and the Canary Islands and the current French territories of Mayotte and La Réunion².



In many countries in the region the official language of instruction in schools is a European language such as English, French, or Portuguese. This means that students who do not speak the language of instruction at home may face significant barriers to learning. Research has shown that students who are taught in a language that is not their home language may struggle to understand the content, leading

² Heine, Bernd; Heine, Bernd, eds. (2000). African Languages: an Introduction. Cambridge University Press.

³ Wikipedia, Languages of Africa, https://en.wikipedia.org/wiki/Languages_of_Africa

to poor academic performance and low levels of educational attainment. It's worth noting that the language policies and practices in schools vary widely within a country, and even within different regions or school systems within a country. Therefore, the exact number of compulsory languages to learn in schools in Sub-Saharan African countries can vary depending on the specific context.

The issue of language education in Sub-Saharan Africa has been a topic of concern for policymakers, educators, and researchers for many years. Despite various initiatives and policies aimed at promoting multilingual education, many challenges still exist. This study aims to explore the challenges faced by teachers in Sub-Saharan Africa when instructing students who do not have their home language as the language of instruction. By investigating the available data, the study seeks to identify the scope and the nature of phenomena. The study aims to contribute to the development of more awareness on the topic and share the findings of the data shortage and possible research topics for future.

Problem statement and significance of the research topic

Problem statement

“Teachers are the most important factor in student learning. The bilingual or multilingual classroom is no exception”⁴.

Despite the linguistic diversity of Sub-Saharan Africa, language policies and education systems in the region have historically favored the use of colonial languages as the primary languages of instruction. This has created significant challenges for teachers in effectively instructing multilingual students who do not have their home language as the language of instruction. Firstly, the literature names a lack of resources and trained teachers to implement multilingual education policies. Also, the challenges include limited access to educational materials and poor comprehension, which can lead to low levels of literacy and poor educational outcomes for many students in the region. Additionally, in some cases there is a perception that European languages are more prestigious or valuable, leading some families to prioritize the learning of these languages over their own indigenous languages⁵.

To mention, most research focuses on the language of instruction policies and practices outcomes for the students and their study quality. For example, one of the common problem statement is that

⁴ WB

⁵ Global Education Monitoring Report of 2020

learning in the mother tongue is vital, especially in primary school, to avoid knowledge gaps and increase the speed and results of learning. There is a vast scope of data proving that instruction of students in their L1 or home language correlates to better testing scores and diminishes social inclusion. In some African countries, children with three years of primary education cannot identify a single written word, and may only know one letter. Without consideration of language of instruction issues, one might erroneously conclude that teachers lack the knowledge and skills to teach, or that students are too disadvantaged to learn. An alternative, plausible consideration is that teachers are required to provide instruction in a language that students do not speak or understand. The low test scores in some instances simply reflect this near-total lack of understanding of the language used for teaching and/or testing; they do not indicate any inability to learn under the right learning conditions⁶. The literature also documented problem of social exclusion of disadvantaged children and even practices of punishment, humiliation, restriction, and discrimination by teachers towards children speaking their home language at school, which assuredly affects their social, economic, cognitive, and emotional development.

As it was already mentioned, most attention related to the topic goes to the students and the outcomes related to study results and quality. Teachers and their challenges and needs receive less attention in the worldwide education assessments and academic research. Still, there is a reasonable amount of discussion on some areas which can be categorized into three: pedagogical, socio-cultural, and systemic. Pedagogical teachers' challenges discussed usually try to capture a problem of a lack of training and resources for teachers to effectively instruct students who are multilingual. This category has most information and data available and therefore in this paper it will also be discussed the most. Much less can be found on teachers' socio-cultural challenges involve issues such as language attitudes and beliefs, cultural identity, and student motivation. This aspect is one of the most hard to capture by broader systematic assessments. Lastly, systemic teachers' challenges include policies and structures that effect success of teaching in multilingual environment.

There is no single systematic assessment of teacher proficiency levels in teaching in the language of instruction neither region wide nor Worldwide. However, there is some data available on teacher proficiency levels in teaching in LoI in Africa, but it vary depending on the country and the language in question. For example, according to UNESCO's "Global Education Monitoring Report 2020", in Ethiopia, only 57% of teachers in primary school were found to be proficient in the language of instruction, and in Tanzania, only 49% of teachers in lower secondary school were found to be proficient

⁶ WB: Effective LoI policies

in the language of instruction. These findings suggest that many teachers in sub-Saharan Africa may face challenges when instructing multilingual students.

On the policy level, despite various initiatives aimed at promoting multilingual education, many challenges still exist in the Sub Saharan Africa. As World Bank analysts observe⁷, countries pursuing LoI policies that promote the use of languages neither spoken nor understood by teachers and students see a disappointing return on their investment in education. These policies contribute to higher dropout rates, repetition rates, and lower learning overall. Unfortunately, requiring teachers to provide instruction in languages that neither they nor the students speak is a common practice which results in vast majority of students failing to acquire foundational literacy skills.

Significance of the research topic

The challenges facing teachers in Sub-Saharan Africa who are instructing multilingual students have important implications for educational equity and social justice in the region. Research evidence indicates that when children are taught in the medium of their home languages, especially in the early years of their education, the results are better participation in class, less attrition and stronger learning outcomes (Wagner, 2017; Trudell, 2004; UNICEF, 2016).

On contrary, research suggests that mother-tongue instruction improves learning outcomes including the ability of children to learn languages later in school known as language transfer (e.g.: reviews by August & Shanahan 2006; Ball 2010; Piper et al. 2018). Immigrant children have been found to be less academically resilient and have lower cognitive achievement if they do not speak the language of instruction at home compared to immigrant children who do speak the language of instruction (OECD 2018). A number of studies have estimated country-level differences in cognitive achievement for ethnic minorities or indigenous peoples when their home language is not the language of instruction; these studies generally find lower performance on tests (e.g.: Stevens & Dworkin 2019)⁸.

In light of this evidence, why are so many countries in Sub Saharan Africa and not only still choosing a LoI that results in significantly worse learning outcomes and social exclusion? One assumption can be that policy makers lack a knowledge of the benefits of teaching the language that students best speak and understand. Other factors are arguably less tractable. Language choices for education are often the result of political considerations beyond the education sector. A phenomenon that is still very relevant for Sub Saharan Africa countries is nation-building. Language is closely tied to

⁷ Loud and Clear: Effective Language of Instruction Policies for Learning, 2021,

⁸ UNESCO methodology

national identity and political identity. Sometimes it involves the promotion of one group's language at the expense of the languages of other groups. Language is closely tied to national identity and political identity. To add, language proficiency has labor market value. Parents tend to prioritize competence in metropolitan or international languages as central to their children's career success.

By exploring the extent and nature of the challenges faced by teachers in Sub-Saharan Africa while teaching in multilingual environment, this paper aims to contribute to the awareness about the topic. This paper will focus on two research questions and will aim to add a couple remarks and findings to the academic discussion on this topic and suggest directions for further research.

Research question

This paper will focus on one research topic: "To what extent do teachers face challenges in Sub-Saharan Africa when instructing students whose first or home language is different from the language of instruction?"

To answer this question two study objectives are posed:

First objective. This research question explicitly links the challenges faced by teachers to the SDG 4.5.2 indicator, which measures the percentage of students in early grades, at the end of primary, and at the end of lower secondary education who have their first or home language as the language of instruction. By using and analyzing this indicator data, the study will provide a clear scope of students who do not have LoI as their L1 or home language. The study will use the newest data available in measuring the SDG 4.5.2 indicator and therefore will be an empirical study using an open-source data. This will allow to understand to what extent teachers have to deal with this phenomenon.

Second objective of this is to look at data available on teachers' proficiency in LoI. One of the most comprehensive data of teachers proficiency is provided by Programme for the Analysis of Education Systems (PASEC 2019): Quality of education systems in French-speaking Sub-Saharan Africa: Teaching/learning performance and Environment in primary education. Since this report covers 14 countries from 49 it provides a relevant data to make insights. Fragmented data is also available from other sources.

The study will inevitably touch on the nature of the challenges faced by teachers in Sub-Saharan Africa when instructing students whose first or home language is different from the language of instruction. The phrase "nature of the challenges" refers to the types and qualities of the teachers' challenges. By adding some remarks and information on the nature of the challenges, the study aims to portray a full picture on issue discussed.

Due to the scope of this academic paper, the related, but important research questions will be left aside. These topics are researched and the vast body of literature on these topics can be found and sometimes will be used in the paper when it is purposeful.

1. What are the specific challenges faced by teachers in Sub-Saharan Africa when instructing students in their first or home language in early grades, at the end of primary, and at the end of lower secondary education.
2. How do language barriers impact the teaching and learning process in Sub-Saharan African classrooms where students do not share the same language as the language of instruction?
3. What strategies do teachers in Sub-Saharan Africa use to address language challenges when instructing students who do not have their first or home language as the language of instruction?
4. What resources and support systems are available to teachers in Sub-Saharan Africa to address language challenges in the classroom when instructing students who do not have their first or home language as the language of instruction?

2. Literature Review

On Language of Instruction in Sub-Saharan Africa

The language of instruction topic has been widely studied in the field of education and is known as the "language-in-education" or "language of instruction" issue. Some of the main challenges identified in the literature include:

1. Language barrier: When students are taught in a language that is not their first or home language, they may struggle to understand the content being taught. This can lead to difficulties in comprehending lessons, participating in classroom discussions, and completing assignments.
2. Limited resources and materials in local languages: In many Sub-Saharan African countries, there may be a lack of educational resources and materials, such as textbooks, in local languages. This can make it challenging for teachers to find appropriate teaching materials that are relevant to students' cultural contexts and linguistic backgrounds.
3. Teacher training and language proficiency: Teachers may face challenges in being proficient in the language of instruction used in schools, especially if it is not their first language. This can affect their ability to effectively deliver lessons and provide support to students who are learning in a language that is not familiar to them.

4. Code-switching and language mixing: In classrooms where students have different linguistic backgrounds, there may be a tendency for students and teachers to code-switch or mix languages, which can further complicate the language of instruction and lead to confusion among students.
5. Cultural disconnect: When students are taught in a language that is not aligned with their cultural context, it can create a disconnect between their home culture and the culture promoted in the school. This can impact students' sense of identity and engagement in the learning process.
6. Assessment and evaluation challenges: Assessing students' learning and progress can be challenging when the language of instruction is different from their first or home language. Traditional assessment methods may not accurately measure students' knowledge and skills, leading to potential biases and inaccuracies.

These are some of the challenges that have been documented in the literature regarding education of students whose first or home language is different from the language of instruction. It's important to note that the specific challenges may vary depending on the country, context, and language policies in place. The evident trend is that researchers and practitioners continue to explore strategies and solutions to address these challenges and promote inclusive and effective education for all students, regardless of their linguistic backgrounds in Sub-Saharan Africa and Worldwide.

On teachers' challenges regarding language of instruction

When discussing the nature of challenges faced by teachers in Sub-Saharan Africa while instructing multilingual students, the following sub-topics are found in the literature:

On language of instruction. One of the main challenges facing teachers in Sub-Saharan Africa is the use of a language of instruction that is not the first language of many students. For example, in a study by Mutonyi and Norton (2017), teachers in Kenya reported that students who were taught in a language that was not their first language faced significant challenges in understanding the content of their lessons. The teachers reported that these students struggled to participate in classroom activities and often performed poorly on assessments.

On teacher training. Another challenge facing teachers in Sub-Saharan Africa is a lack of training in how to instruct multilingual students effectively. Teachers may not have the necessary knowledge or skills to work with students who speak different languages, leading to ineffective instruction and poor student outcomes. For example, in a study by Ngwaru (2016), teachers in Tanzania reported a lack of training in how to instruct multilingual students effectively. The teachers reported that they were not

familiar with the languages spoken by their students and were unsure of how to adapt their instruction to meet the needs of these students. The study recommended that teacher training programs in Tanzania should include training on how to work with multilingual students.

Linguistic and Cultural Bias: Another challenge facing teachers in Sub-Saharan Africa is the presence of linguistic and cultural biases in education systems. Teachers may be more familiar with the language and culture of the dominant group in society, leading to biases in instruction and assessment. For example, in a study by Tcheutchoua and Mahlo (2019), teachers in Cameroon reported that they were more familiar with French, the language of the dominant group, than with the local languages spoken by many of their students. The teachers reported that this led to biases in their instruction and assessment, as they were more likely to favor students who spoke French fluently. The study recommended that education systems in Cameroon should work to promote linguistic and cultural diversity, rather than reinforcing biases.

It is worth to emphasize that most focus in literature centers around student's possibilities, equity, study results and similar, but significantly less attention gets teacher's challenges while working in multilingual environment. To note, literature covers other than that teachers' challenges, that can be called more generic: To name some:

Lack of resources. Many schools in Sub-Saharan Africa lack adequate resources such as textbooks, teaching materials, and technology, which makes it difficult for teachers to create effective lesson plans and engage students.

Poor infrastructure. Some data suggests that the conditions of school buildings in the region gets improved, but the situation varies from country to country, from region to region. One of struggles teachers face is the quality of roads – in some cases it takes hours for them to get to schools due to distance and quality of roads and transport infrastructure.

Irregular and low salaries. Situation varies, but in many countries of the region, teachers do not get salaries regularly – sometimes it is paid several months later than supposed to. Salaries for teachers in Sub-Saharan Africa can vary significantly across countries and educational systems. In many countries, teacher salaries tend to be lower compared to other professions, leading to challenges in attracting and retaining qualified educators. Limited financial resources and competing priorities within national budgets often contribute to the relatively low remuneration for teachers.

Large class sizes. In many Sub-Saharan African countries, class sizes are large, and teachers may not have enough time to give individual attention to each student, particularly those who do not have the school language as their first language.

Inadequate support systems. Teachers in Sub-Saharan Africa may not have access to adequate support systems such as mentorship programs, professional development opportunities, or networks of other teachers to share ideas and best practices.

Socioeconomic challenges. Many students in Sub-Saharan Africa come from disadvantaged socioeconomic backgrounds, which can impact their academic performance and create additional teacher's challenges.

Cultural differences. Students in Sub-Saharan Africa come from diverse cultural backgrounds, and teachers may face challenges in bridging cultural differences and creating inclusive learning environments.

To summarize, there is some attention to challenges faced by teachers in Sub-Saharan Africa while instructing multilingual students, however, it could be more. The coherent data is missing as there is no global or regional assessment done regularly on this aspect.

3. Methodology

Research Design

For the first research question, this study will utilize the data from the SDG 4.5.2 indicator “4.5.2: Percentage of students in primary education whose first or home language is the language of instruction”, which is a publicly available dataset provided by the United Nations. The data is available on [the SDG Data website](#). The indicator for SDG 4.5.2 is calculated based on the language(s) of instruction used in schools and the number of students who speak that language as their first or home language. The aim is to track progress in ensuring that more students are taught in languages they are comfortable with, and to identify any gaps or disparities that need to be addressed in order to achieve this goal.

The 2030 Global Agenda for Sustainable Development was adopted by United Nations (UN) Member States in 2015. The 17 goals of the SDGs are intended to rally the world behind reducing poverty and enhancing global education, health, and economic sustainability (UNDESA, 2015). The key principle behind this global agenda is to “leave no one behind”, through a focus on holistic development (UNSDG, 2021). The SDG indicators are the means used to measure progress towards the goals. SDG 4 (“Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all”) has ten targets and eleven global indicators. In addition, as UNESCO UIS informs, 32 thematic indicators have been developed, to cover aspects of SDG 4 that are not addressed by the global indicators. The thematic indicators were developed by the Technical Advisory Group (TAG), comprised of experts from

UN member states, civil society organizations, UNICEF, the World Bank, the OECD, the Education for All (EFA) Global Monitoring Report and UNESCO⁹.

SDG 4.5.2 is a specific target under the SDG Goal 4 (SDG 4), which is focused on ensuring inclusive and equitable quality education and promoting lifelong learning opportunities for all. SDG 4.5.2 specifically aims to measure the percentage of students in the early grades, at the end of primary school, and at the end of lower secondary school who have their first or home language as the language of instruction. This is important because researches show that students are more likely to succeed in school and learn effectively when they are taught in a language that they understand well. When students are taught in a language they are not proficient in, it can be difficult for them to grasp new concepts, leading to poor academic outcomes.

The indicator for SDG 4.5.2 is calculated based on the language(s) of instruction used in schools and the number of students who speak that language as their first or home language. The aim is to track progress in ensuring that more students are taught in languages they are comfortable with, and to identify any gaps or disparities that need to be addressed in order to achieve this goal.

SDG 4.5.2 is important for promoting equity and access to education for all students, particularly those from marginalized communities who may face language barriers in accessing education. It also helps to ensure that education systems are responsive to the linguistic and cultural diversity of their students, which is crucial for promoting inclusive and effective learning environments.

To track progress towards SDG 4.5.2, data is collected and reported by national governments, international organizations such as UNESCO, and other stakeholders in education. By monitoring progress towards this goal, policymakers and educators can better understand the challenges and opportunities related to language and education in their contexts, and take action to ensure that all students have the best possible chance to learn and succeed. For study research metadata from PASEC 2014 report is used. In PASEC survey children of both 2nd grade students and 6th grade students are asked whether language spoken at home matches LoI.

The study will also employ other data from the reports of UNESCO (like international student assessments TIMSS, PISA, LLECE, SACMEQ and PASEC), World Bank, UNICEF and other analyses available both in literature and electronic sources. This data is widely used in the literature on LoI in Africa.

⁹ SDG UN data

“The challenge of language in data collection should not be underestimated¹⁰”

There is a significant amount of discussion¹¹ on challenges to get a reliable information from different countries of the world and Sub Saharan Africa to measure the relevant indicators to LoI. As 4.5.2 is now the official indicator of SDGs there is some data to compare the countries and track the progress in the future. However, what regards teachers’ challenges in this area, unfortunately, the situation is much more complicated. 4.5.2 data has only indirect link, therefore the data on teachers’ proficiency in LoI was looked all over the available sources.

For the teachers proficiency in LoI, one of the most comprehensive data is provided by Programme for the Analysis of Education Systems (PASEC 2019): Quality of education systems in French-speaking Sub-saharan Africa. The PASEC2019 assessment also collected a large amount of contextual information about students, teachers, principals, classes and schools in order to assess the profiles of learners and teachers, judge the level of resource distribution and understand school practices with a view to relating these factors to student performance. Tests, questionnaires, survey procedures and data analyses were standardised across all countries and throughout the assessment process to ensure the comparability of results between countries and over time¹².

4. Results and Discussion

Overview of the scope of students whose first or home language is the LoI

Based on the provided data from the SDG Data in Table 1, which shows the percentage of students in early grades who have their first or home language as the language of instruction in various countries in Sub-Saharan Africa, following observation can be made - there is significant variation among countries from Burundi scoring maximal 93,67 percent to Burkina Faso scoring the minimal 0,4 percent. There are 12 countries for which data is available, but South Africa should not be included because of its special historical background of apartheid.

¹⁰ Global Education report

¹¹ For example, Measuring thematic indicator 4.5.2: Challenges and alternatives, UNESCO Global Education Monitoring Report

¹² Pasec 2019

Region	Country	2014	2015	2016	2019
SDG: Sub-Saharan Africa	Benin	1.36			
SDG: Sub-Saharan Africa	Burkina Faso	0.41			
SDG: Sub-Saharan Africa	Burundi	03.87			
SDG: Sub-Saharan Africa	Cameroon	15.55			
SDG: Sub-Saharan Africa	Chad	0.50			
SDG: Sub-Saharan Africa	Congo	12.22			
SDG: Sub-Saharan Africa	Côte d'Ivoire	7.82			
SDG: Sub-Saharan Africa	Niger	8.51			
SDG: Sub-Saharan Africa	Senegal	1.15			
SDG: Sub-Saharan Africa	Togo	1.23			
SDG: Sub-Saharan Africa	South Africa				34.88

Table 1: The percentage of students in early grades who have their first or home language as the language of instruction in various countries in Sub-Saharan Africa. Data source: [SDG Data](#)

South Africa is often considered unique in the context of African studies due to its complex history, socio-political dynamics, and cultural diversity. The country's unique characteristics stem from its historical experiences, including the system of apartheid that was implemented from 1948 to 1994. Apartheid was a policy of racial segregation and discrimination enforced by the South African government, which had a profound impact on the country's ethnical composition and social fabric. The ethnical composition of Whites (around 9 percent) in South Africa primarily consists of individuals of European descent, including Afrikaners (descendants of Dutch settlers) and English-speaking South Africans. The presence of a significant and privileged White population in South Africa has played a crucial role in shaping the country's history, politics, and social dynamics.

Table 2 demonstrates the percentage of students in early grades as well as end of primary and lower secondary (where data is available) who have their first or home language as language of instruction (%) by 2014 PASEC report as metadata.

Country	Early grade	End of primary	Lower secondary
Benin	1,4	4,9	
Botswana			12,6
Burkina Faso	0,4	5,8	
Burundi	93,7	3,0	
Cameroon	15,5	15,7	
Chad	0,9	6,6	
Congo	12,2	20,8	
Côte d'Ivoire	7,0	12,5	
DRC		30,2	
Egypt			76,8
Gambia		3,2	
Ghana		12,6	
Lesotho		36,8	
Morocco	46,7		39,1
Niger	0,5	3,8	
Senegal	1,2	5,8	
Sierra Leone		1,9	
South Africa			30,9
Togo	1,2	3,0	

*Table 2: Percentage of students who have their first or home language as language of instruction (%).
Data source: [SDG Data](#), by 2014*

Altogether, about 80% of children in sub-Saharan Africa are not instructed in their first language. The data suggests a significant scope of challenge for African teachers in working in multilingual communities across the region, potentially reflecting its linguistic diversity and language policies. Data shows that in many countries, including Benin, Burkina Faso, Chad, Niger, Senegal, and Togo, the percentage of students who have their first/home language as the language of instruction is less than 2% in early grades, but increases slightly by the end of primary education. This may be related to the disproportionately higher dropout rates of children whose first/home language is different from the language of instruction.

Burundi case

Burundi, located in East Africa, has a highest and standing out percentage of 93.67% of students in early grades who have their first or home language as the language of instruction. Therefore it is relevant to the study to look deeper into the case and try to find out if teachers' face seemingly less challenges in Burundi than other countries of the region assessed.

Burundi has three official languages: Kirundi, French and English. More than 80 percent of population is Hutu ethnic group and Tutsi is a minority. In primary schools, the language of instruction is typically Kirundi, which is the national language and widely spoken by the majority of the population. It is important to note that Kirundi is commonly associated with the Hutu people, it is not the exclusive home language for all Hutu individuals. Language diversity exists within the Hutu community especially in dialects, as well as in the broader Burundian society. As students progress to higher grades, the use of French as a medium of instruction becomes more prominent. French is taught as a subject and gradually becomes the primary language of instruction in secondary schools and higher education institutions. This shift towards French aims to prepare students for further education and improve their access to higher-level studies and employment opportunities. English is taught as a subject and is increasingly being introduced in the education system. Swahili is also a language spoken by a large part of the population, especially in urban centers.

The data provided by SDG Data pertains to the percentage of students in early grades who have their first or home language as the language of instruction, and it allows to make insights on the scope of challenges faced by teachers. In this case teachers in Burundi should face significantly less challenges related to teaching multilingual students in class. To be more exact, teachers should not be challenged in working in several languages or in a language they are not mastered well enough. Further, students should more easily understand the content being taught, participate more and be more successful in testing. The issue of limited resources and materials in languages should be lesser than in many other Sub-Saharan African countries. Teachers-students should have more positive relationships free from major cultural misunderstandings and differences. More to that, speed of learning should be better because of no language mixing or code switching in classrooms where students have different linguistic backgrounds. To evaluate the nature of challenges faced by teachers in Burundi classrooms, various factors need to be considered, including language proficiency of teachers, availability of teaching materials in different languages, teacher training and support, language policy implementation, and cultural and sociolinguistic dynamics within the country. Unfortunately, the literature on this topic is scarce.

However, there is some data available on the students performance in the early grades. according to the assessment conducted by the Project to support the improvement of learning at the start of schooling (PAADESCO), only 15% of 2nd year students have reaches the sufficient threshold in Kirundi. In the 4th year, 41% of students reached the sufficient threshold proficiency in Kirundi, with 59% being therefore considered to have difficulties. What concerns the French language, 98% of pupils, at the national level, do not reach insufficient skills. Burundi Education Sector Analyses by International Institute of Education Studies (IIEP) UNESCO concludes, that the use of Kirundi as LoI substantially improves student performance, regardless its levels¹³.

There are also some interesting findings related to the gender factor of students and teachers. If individual performance of 2nd year pupils does not vary not according to the sex of their teachers, results for the 4th year show quite clearly that the level of achievement of the pupils entrusted to of female teachers is higher than that students entrusted to male teachers in all three assessed disciplines. The girls, when supervised by female teachers, are significantly more efficient. Another finding is related to the experience of teachers especially in learning languages. Students whose teachers have at least basic diploma are much more efficient and this observation magnifies the role of teacher training which is not new to the literature.

Burundi education sector report and other IIEP UNESCO sources discuss various aspects of Burundi education system, policies and possibilities to improve it. It is important to note that Burundi is the poorest country in the world, according to gross domestic product (GDP) per capita, with \$292 in 2022, and a least developed country. In Burundi, according to the 2016 secondary data review report of the Education in an Emergency working group, ‘the socio-political crisis that the country has experienced since April 2015 has exposed around 1.1 million Burundians throughout the country to physical and psychological threats, regardless of age, gender or ethnic group’.

The socio-political crisis in Burundi that began in April 2015 refers to a period of significant political unrest and violence within the country. The crisis was triggered by the announcement of President Pierre Nkurunziza's decision to seek a controversial third term in office, which was viewed by many as a violation of the constitution and the Arusha Peace Agreement that ended the civil war in 2005. During this period, there were reports of extrajudicial killings, enforced disappearances, torture, arbitrary arrests, and suppression of freedom of expression and media. The crisis also resulted in a significant number of Burundians being internally displaced or seeking refuge in neighboring countries due to the insecurity and fear of persecution.

¹³ PAAESCO IIEP UNESCO

The report of the Education in an Emergency working group goes on to say that many girls and boys have suffered the effects of disrupted education. It also states that budget cuts have had a serious impact on the government’s ability to finance and provide basic social services such as education. Additionally, the international sanctions imposed by donor countries have affected the country’s economy and prevented parents from providing for their children¹⁴.

However, according to PASEC 2019 report, countries’ growth rate appeared to be uncorrelated with performance in reading and mathematics either at the start or at the end of primary education¹⁵. The case of Burundi is very illustrative:

Figure 3.1: GDP growth rate in 2019 and student scores in language of instruction - Early primary

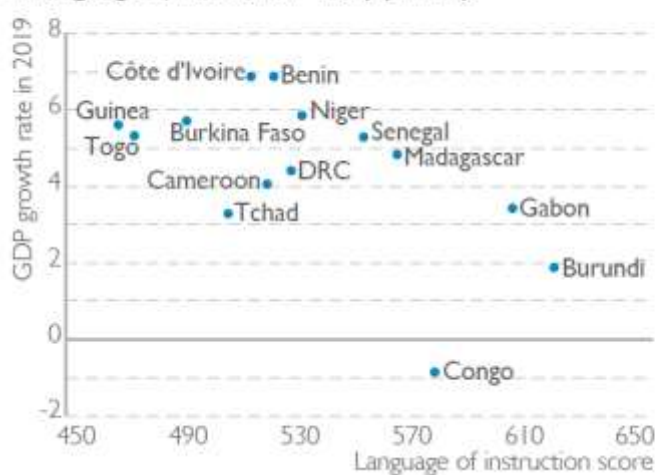
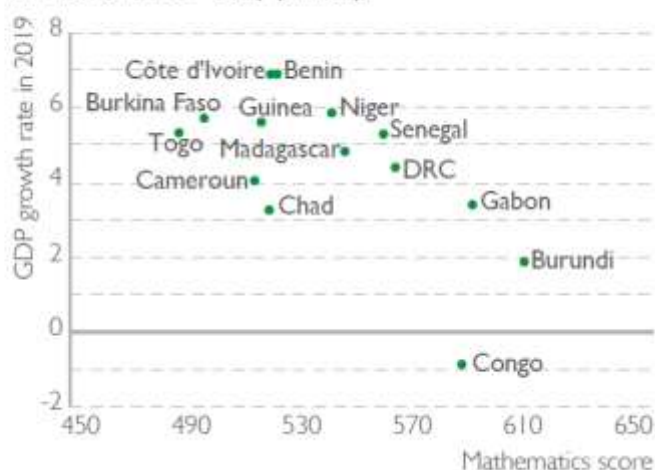


Figure 3.2: GDP growth rate in 2019 and student scores in mathematics - Early primary



The finding is important to emphasize the other factors – mostly the policy of language education adopted by the country. More on the topic this study focuses later in the part “Language Policy Implications” and “Ethiopia Case”.

A thorough comparative study analyzing the nature challenges faced by teachers due to multilingualism in Burundi and other SDG asset countries would require access to specific data, research studies, or reports that investigate the experiences and perceptions of teachers, language policies and practices, and the overall educational context in these countries. Without such data and analysis, it is not possible to make a definitive statement about the challenges and the scope of it faced by teachers in Burundi compared to other SDG assessed countries regarding usage of LoI and multilingualism in school classes. It is important to note that the data provided represents specific years and the latest is from 2019. There may have been changes in language policies or circumstances since then. However, the data offers

¹⁴ Emergency in education

¹⁵ PASEC

insights into the varying degrees of implementation of language of instruction policies in Sub-Saharan African countries.

Overview on the scope of teachers' proficiency in LoI

There is some data available on teacher proficiency levels in teaching in the language of instruction in Africa, but it can vary depending on the country and the language in question. UNESCO's "Global Education Monitoring Report 2020" provides some data on the language proficiency levels of teachers in Sub-Saharan Africa. According to the report, in some countries of a region, a significant proportion of teachers do not have the necessary proficiency in the language of instruction to teach effectively. For example, in Ethiopia, only 57% of teachers in primary school were found to be proficient in the language of instruction, and in Tanzania, only 49% of teachers in lower secondary school were found to be proficient in the language of instruction. These findings suggest that many teachers in sub-saharan africa may face challenges when instructing multilingual students. Countries may not have enough teachers who are literate in L1s or they may not be posted appropriately around the country. This problem is known as teachers' insufficiency problem. Teachers in larger cities may be proficient in the official languages but lack L1 language skills for teaching. Teachers in rural areas may have the opposite skills, namely proficiency in L1s, but not in the official language¹⁶.

World Bank advocates that careful teacher recruitment, selection, support, and matching (of student and teacher language competencies) is critical to effective L1 instruction. Centralized teacher posting systems often result in teachers being sent to work outside their region of language proficiency. In some countries, and for certain languages, systems for the hiring and allocation of teachers need to ensure there is a match between the language knowledge of student and teacher respectively. That is called teachers' allocation problem. World Bank report states that effective communication with teachers and teachers' unions or associations will be required to build widespread support among teachers for any changes in teacher employment. Language mapping exercises can gather information on the students' and teachers' level of proficiency in their primary and secondary language (assessed proficiency, rather than reported proficiency, as there can be significant differences between the two) and provide information for matching students and teachers by area, school, and classroom.

Strong curricula require adequate teaching and learning materials. That is known as quality materials issue. World Bank analysts advocates that teacher guides with structured lesson plans, textbooks, and supplementary reading materials for reading practice and content knowledge development are just a few

¹⁶ WB effective LoI Policies

of the inputs needed. Teacher guides must use language that teachers will comprehend, and include content and teaching methods appropriate to the context and available resources. Content difficulty and instructional pacing must be aimed at the “right level” so that instruction focuses on students’ learning challenges. Materials’ developers should use existing evidence to determine the knowledge and skills of children when they begin to learn, and how quickly they can and should progress. Too many curricula are aimed at the top 10–15 percent of learners and leave more than four out of five students in so called Learning Poverty.

One of the most comprehensive data of teachers proficiency is provided by Programme for the Analysis of Education Systems (PASEC 2019): Quality of education systems in French-speaking Sub-saharan Africa; Teaching/learning performance and Environment in primary education. The second cycle of collective assessment of learning outcomes conducted by Conference of the Ministers of Education of French-Speaking Countries (CONFEMEN) was conducted in 14 participating countries. The French-speaking Africa generally refers to the countries in Africa where French is either an official language or widely spoken as a lingua franca. These countries have a historical, cultural, or administrative connection to the French language due to colonial ties with France or other Francophone countries.

All teachers covered by the PASEC2019 were assessed in reading comprehension. The assessment of subject knowledge and skills focused on three cognitive processes: 1) extracting explicit information, 2) making simple inferences and 3) interpreting and combining information. The aim was to determine to what extent teachers had mastered reading comprehension in the language of instruction, could understand the meaning of what they read and had sufficient knowledge of the structures of the language to teach it as a school subject and use it as the language of instruction¹⁷.

Table 3 shows the PASEC2019 proficiency scale for teachers in reading comprehension. This scale reports the levels of teachers across the different countries who participated in the reading comprehension test. It provides information on the scores and the distribution of teachers across the levels and a description of the corresponding skills. Teachers at any given level are able to perform tasks well at that level, less well at higher levels and better at lower levels.

¹⁷ PASEC 2019

Level	Score	Percentage of teachers at that level	Description of teachers' skills
Level 3	497 or more	52.0%	At this level, teachers are able to take a step back and engage in general processing of all types of texts. They make complex inferences and are able to combine and interpret multiple implicit ideas, drawing on their own experience and knowledge. They are capable of detaching themselves from the literal meaning of a text to identify the author's intention and perceive the humorous dimension of a text (even when this is subtle). They can take the content of a text into account to formulate a new idea that is relevant to the information they have read.
Level 2	Between 394 and 496	32.2%	Teachers display the ability to use paraphrased information. They are able to make simple inferences in any type of text. They are also able to perceive the anaphoric system of pronouns, synonyms and other substitutes used in a literary text. They can combine information from different parts of a text.
Level 1	Between 290 and 393	14.2%	Teachers are able to locate explicit information in medium-length or long texts using cues from the text and the questions. They can use this skill on narrative and informative texts. They are able to locate some elementary paraphrases in a text.
Below Level 1	Less than 290	1.6%	Teachers below Level 1 do not sufficiently demonstrate the skills measured by this test in reading comprehension. They struggle with the knowledge and skills of Level 1.

Table 3 Teachers' proficiency levels in reading comprehension in Sub Saharan Africa, PASEC 2019

Overall, slightly over half of the teachers surveyed were at Level 3 (497 points or more) on the proficiency scale, and just under a third were at Level 2 (394-496 points). Just under 15% were at Level 1 (290-393 points), while less than 2% did not demonstrate the knowledge and skills assessed in this test (less than 290 points). These results revealed a generally satisfactory level of knowledge and skills in reading comprehension among the teachers surveyed. However, teachers at or below Level 1 do not have satisfactory level of knowledge and skills in reading and probably require specific training.

Essentially, these findings reveal the need to implement specific training for teachers at each level of the reading comprehension skills scale. More than 70% of the teachers were at Level 3 of the reading comprehension proficiency scale in half of the countries (7 out of 14): Côte d'Ivoire (87.8%), Senegal (81.9%), Benin (75.6%), Burkina Faso (75.5%), Togo (74.3%), Gabon (74.2%) and Cameroon (72.3%). This reveals a good level of reading comprehension in this group of countries which should be reinforced through specific training. The lowest percentages (less than 20%) of teachers at Level 3 were observed in Madagascar (11.2%), DRC (16.3%) and Chad (18.5%); elsewhere, they varied between 29.9% in Burundi and 42.7% in Niger. Report concludes, that in these countries, teachers' reading comprehension

skills need to be improved by means of training focusing on the cognitive processes involved in the PASEC2019 subject test for teachers¹⁸.

Graphical distribution of teachers across the different levels of the reading proficiency scale by country is added as Table 4 in Annex 2.

Comparison of the results in reading comprehension and in the *teaching of reading* comprehension brought out some striking differences. Teachers showed knowledge and skills at Levels 2 or 3 in reading comprehension, but their knowledge and skills in the teaching of reading comprehension were much less secure (with the correct response rate for items ranging from 43% to 52%, and half the countries scoring below average). In other words, while the vast majority of teachers were able to use reading comprehension processes satisfactorily when reading a text themselves, they were significantly more likely to experience difficulties in teaching those processes to students. All these findings indicate a need for pre-service education and/or in-service training extending beyond mastery of subject content and placing emphasis on issues relating to the teaching and learning of that content.

Teachers in sub-Saharan Africa are generally characterized by a low level of education. Future teachers generally begin their pre-service training with a low level of education more than half are educated to upper secondary level (Akkari and Lauwerier, 2015), without necessarily having obtained the associated qualification (World Bank, 2005; Bonnet, 2007). Public sector teachers are usually recruited with a higher initial educational level than contract or community teachers (CONFEMEN, 2007).

Further, PASEC 2019 report shows (Table 6, Annex 2), that four of the five countries with the highest percentage of university-level teachers (Côte d'Ivoire, Gabon, Burundi and Senegal) also had relatively high levels of subject knowledge and teaching knowledge. The situation of Côte d'Ivoire, where 51.8% of teachers were at university level, is especially illustrative:

- 87.8% of teachers were at Level 3 of the reading comprehension proficiency scale, with average scores of 589.3 points and 578.9 points in subject knowledge and teaching knowledge respectively;
- 52.6% of teachers were at Level 3 of the mathematics proficiency scale, with average scores of 548.3 points and 533.4 points in subject knowledge and teaching knowledge respectively.

In order to explore this link in more detail, and given the low proportion (or even non-existence for some countries) of teachers educated to primary level, the differences in scores between teachers educated to secondary level and those educated to university level were presented by PASEC2019 survey (Table 6 in Annex 2 of the study). In all countries apart from Burundi, teachers educated to university level outperformed those educated to secondary level. The highest points difference was 78.4 in Niger.

¹⁸ PASEC 2019

Interestingly, the smallest difference was observed in Burundi – which is taken as a case in this study. This result in Burundi (with -21,3 points) seems surprising, and needs to be explored further. In the PASEC2019 survey (Table 7, Annex 2), an average of 57.7% of teachers expressed positive views about the management of their schools. This positive perception was observed in all countries except for Madagascar and Chad. Other clues from the report are on subjective assessment of teachers on relations with the community and regular salary payment (Table 8 and 9, Annex 2).

Implications of Language Policies

World Bank analysts are sure: “Teachers are the most important factor in student learning”¹⁹. Teachers constitute one of the pillars of education systems: given that their effectiveness is the most important factor in student learning (UNESCO, 2014b; Bold et al., 2017), they should be regarded as an essential resource within schools alongside other resources such as the leadership of school principals (Isabelle, Gélinas-Proulx and Meunier, 2015). This explains the requirement for high-quality teachers in education systems; increasing the number of qualified teachers in developing countries has been identified, within the framework of the sustainable development goals (SDGs), as one of the means to be implemented in order to achieve inclusive quality education for all by 2030²⁰.

The bilingual or multilingual classroom is no exception, and careful teacher recruitment, selection, support, and matching (of student and teacher language competencies) is critical to effective L1 instruction. Good LoI policies make teachers’ jobs easier and ensure that teachers with the right skills are in the right classrooms. Good policies in effect support and develop all teachers in all contexts. The primary language competency of effective teachers in a bilingual learning environment is biliteracy: *oral and written fluency in both languages*. Some teachers will have oral competence in L1s, but they may lack corresponding written L1 competence and L2 competence. Other teachers are more likely to be fluent in oral and written L2, but less able or willing to use L1 for classroom teaching. Identifying teacher competencies is an important step for appropriately planning teacher recruitment and posting.

Language mapping exercises help to identify where teachers lack relevant language proficiency. Short-term solutions have involved contracting community members as teaching assistants or translators. Political and professional sensitivities tend to beset recruitment. Proficiency assessment may make teachers uncomfortable for fear of demotion or demission. Teachers may fear loss of advancement

¹⁹ WB

²⁰ PASEC

opportunities if their skills are associated with languages used in remote regions with less desirable professional conditions. Development partners, governments, and teachers' unions should participate to determine effective and acceptable approaches to teacher deployment.

Effective teaching in L1, and later L2, requires specific pedagogical skills and tools. Support systems must help teachers to acquire the necessary linguistic, pedagogical and other expertise. Language considerations need to inform professional development before and during employment. This can be as simple in the short term as ensuring that training is delivered in a language that teachers speak and understand, or become a longer term approach, such as helping teachers strengthen their L1 and/or L2 literacy skills. The literature highlights the effectiveness of explicit instruction techniques and of coaching.

Ethiopia case

Ethiopia is very ethnically and linguistically diverse, with over 80 officially recognized languages and over 200 dialects. The five largest ethnic groups account for about 78 percent of the population (34.4 percent Oromo, 27 percent Amhara, 6.2 percent Somali, 6.1 percent Tigray and 4 percent Sidama), with ethnic and linguistic diversity greatest in the western and southwestern regions of the country. In 1994, this ethnolinguistic diversity was recognized by the Ethiopian Educational and Training Policy (EETP). The EETP explicitly recognized that L1 education has pedagogical advantages for children's learning and made primary education in 'nationality languages' compulsory, to be followed by a transition to English as a medium of instruction in secondary and higher education. Amharic was to be taught as a language of countrywide communication.

In the early years of policy implementation, larger languages were quickly adopted as a medium of instruction in almost all regions. Gradually, the number of languages used increased and, as of 2015, about 30 languages were being used as a medium of instruction for part or all of instruction in the primary grades, with about 51 languages being offered as a subject.¹⁰⁶ In all regions of the country, English is introduced as a subject in grade 1, while Amharic is introduced as a third language, often starting in grade 3 or 5.

LoI policy, regardless of its content, seems to thrive when the following World Bank criteria are met:

1. It is seen as reflecting a new national direction (e.g. post-revolution policy), and/or
2. The national policy reflects a stronger commitment to national identity.
3. The state is stable and strong enough to resource and align other policies to support it.
4. Local appropriation of language policy aligns with national policy, even if it is not enforced.

Ethiopia has managed to meet 1st, 2nd and 3rd and to some extent 4th criteria. However, despite strong commitment to the policy, implementation continues to face challenges. One of the main - lack of trained teachers. In the early years of implementation, finding trained and qualified teachers who spoke the needed languages was challenging. Despite it, Ethiopia has made gradual but significant progress in addressing this gap. Pre-service teacher training programs for lower-primary teachers in many of these languages are gradually being introduced in Colleges of Teacher Education; in-service teacher training programs have been expanded to upgrade the qualification of unqualified teachers; and teachers are also recruited locally by woredas (districts).

Another challenge - high costs of providing textbooks and other teaching and learning materials. For regions where there are many demographically small languages, the cost of printing textbooks and TLM continues to be high, due to fragmented, more localized procurement and smaller print runs. Further, for many of these languages, written materials other than textbooks remain scarce.

Despite these challenges, as evidence suggests, L1 instruction is having positive impacts on years of schooling as well as learning outcomes in Ethiopia²¹. To conclude, despite the mentioned setbacks, the Ethiopian case can be taken as an example how issues of LoI can be addressed for linguistically diverse students and countries to thrive.

This study will make limited conclusion mainly due to the limited data on teacher's challenges in Africa regarding LoI. However, the analyzed data is sufficient to make some grounded insights, that will be shared later in a paper. Generalizations in general should be done with reservations due to the variation of situation from country to country, from area to area, from school to school. Despite the shortages of data, especially case studies of each country would be useful to provide most grounded conclusions and effective recommendations for further studies of the field or education policy planning and decisions.

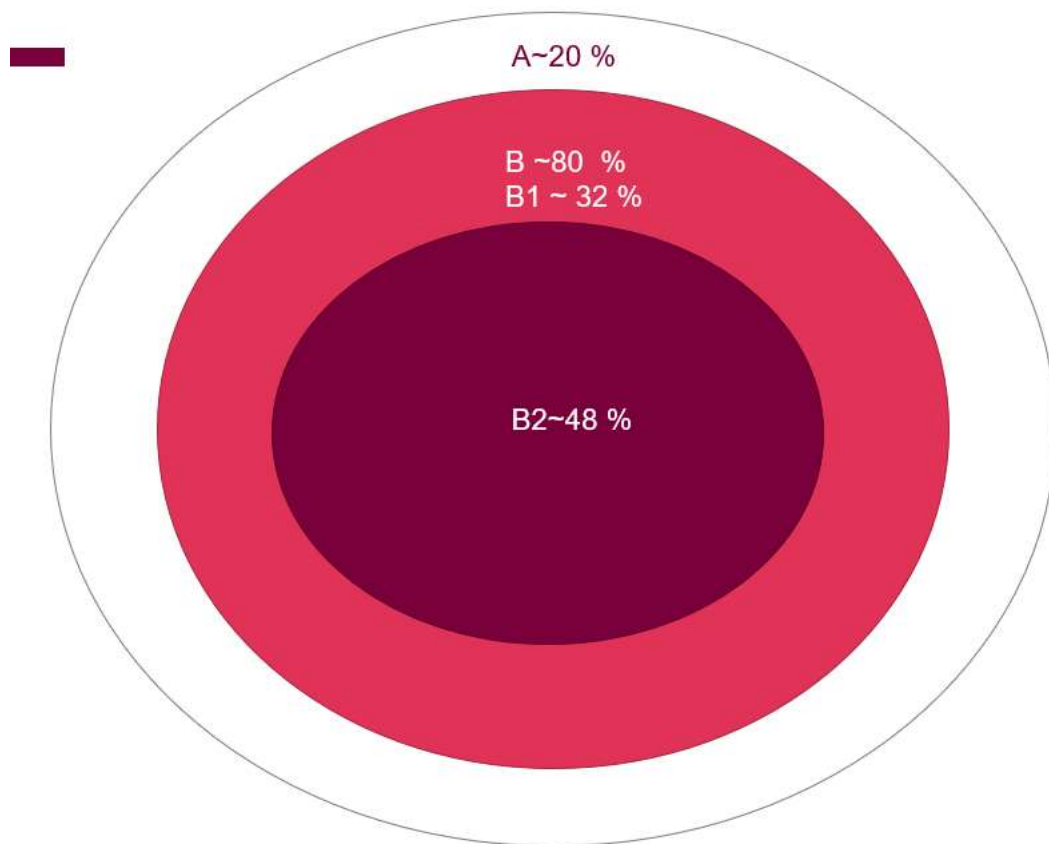
5. Main conclusions and recommendations

The following conclusions can be made from this study regarding the research question “To what extent do teachers face challenges in Sub-Saharan Africa when instructing students whose first or home language is different from the language of instruction?”:

²¹ WB

- In academic discussion and institutional assessment on international level there is some attention to challenges faced by teachers in Sub-Saharan Africa while instructing multilingual students, however, it can be considered insufficient. The coherent data is missing as there is no global or regional assessment done regularly on this aspect.
- The scope of teacher challenges while instructing students in multilingual environments in Sub-Saharan Africa can be assessed from two edge perspectives: from the level of multilingualism of school environment and the linguistic proficiency of teachers in LoI.
- The data from the SDG Data shows significant variation among countries in Sub-Saharan Africa regarding the percentage of students in early grades who have their first or home language as the language of instruction. The range varies considerably, from a maximum of 93.67% in Burundi to a minimum of 0.4% in Burkina Faso, indicating the diversity of language policies in the region.
- Approximately 80% of children in sub-Saharan Africa are taught in languages other than their first language, posing a significant challenge for teachers in multilingual communities across the region. This challenge is compounded by various other difficulties faced by teachers in the least developed countries of the region.
- Teacher proficiency in the language of instruction varies across countries in Sub-Saharan Africa. Data from UNESCO's "Global Education Monitoring Report 2020" highlights that a significant proportion of teachers in some countries lack the necessary proficiency to effectively teach in the language of instruction. This means that a significant proportion of teachers face the challenge of instructing students from the perspective of their own linguistic proficiency level in LoI.
- The PASEC 2019 assessment provides comprehensive data on teacher proficiency in reading comprehension across French-speaking Sub-Saharan African countries. The assessment reveals that slightly over 52 percent of the surveyed teachers were at Level 3 on the proficiency scale, indicating a generally satisfactory level of knowledge and skills in reading comprehension. 15 percent of surveyed teachers' knowledge is not sufficient to teach in LoI. This means, that 48 percent of teachers struggle with language of instruction or can not educate in it at all. Specific training may be required for teachers at Level 1 or below.
- The data suggests that teachers' challenges regarding multilingualism in Sub-Saharan Africa are large and should be addressed as one of the major ones. The challenge level varies from country to country, from region to region, and largely depends on national policies in education.
- Overall, as the diagram below shows (group A of students) only 20 percent or 1 in 5 students in Sub-Saharan Africa are educated in their first/home language by teachers who know the language

proficiently. Named group B is the largest - 80 percent of children in sub-Saharan Africa are taught in languages other than their first language. But one part of this group - B1- is in a more advanced situation, because 32 percent of them are taught by teachers who do have proficient level of the LoI. The most disadvantaged, but significant group, which makes of around half of students, captured by surveys, is most vulnerable regarding the education in their home language. B2 group – 48 percent of Sub Saharan students are instructed in the language which is other than their first/home language and are taught by teachers who either know the LoI insufficiently to teach or are struggling with teaching in LoI.



On Burundi case:

- Burundi stands out with a highest measured percentage (93.67%) of students in early grades who have their first or home language as the language of instruction. This suggests that teachers in Burundi may face fewer challenges related to teaching multilingual students compared to other countries in the region. However, further investigation is needed to understand the factors contributing to lower performance in literature and mathematics assessments among Burundi

students, despite instruction in their first language. Possibly, other factors, such as teaching quality and students' environmental aspects, also play a significant role.

- In the case of Burundi, it is noteworthy that teachers educated to university level do not outperform those educated to secondary level. However, compared to other assessed francophone countries, teachers in Burundi exhibit higher levels of satisfaction with school management, community relations, and regularity of salary payment. These insights provide valuable information about their teaching conditions, implying that their challenges may be relatively lesser compared to other countries examined in this research.

Main recommendations

Based on the research and its conclusions, these recommendations are suggested:

- To explore further teacher challenges: It is recommended to conduct comprehensive research to gain a better understanding of the scale and nature of challenges faced by teachers instructing students in multilingual environments. This research is crucial for developing effective strategies and interventions within the current language policy framework in the region and worldwide.
- To include LoI indicator: It is recommended to incorporate a specific indicator in the SDGs framework to measure the proficiency and comfort of teachers in instructing in the language of instruction. This indicator will provide valuable insights into the importance of addressing language-related challenges.
- To tailor country-specific recommendations: It is recommended to develop context-specific recommendations for each country, considering available data and the unique dynamics of the country. While drawing from good practice examples, it is vital to consider local contexts and address the specific challenges faced by teachers, because it might vary from region to region in the same country.
- To advocate for language policy awareness: It is recommended to engage in active advocacy efforts to raise awareness about the benefits of teaching in students' best-spoken and understood language. It is important to demonstrate the positive impact of language of instruction policies and emphasize the need for proper teaching conditions.
- To ensure inclusive decision-making: It is recommended to facilitate inclusive decision-making processes when formulating language of instruction policies. It is important to seek input from

diverse stakeholders, considering disparities between regions (urban, rural, isolated areas, conflict situations), different school types (public, private), and socio-cultural or socio-economic factors. Policy choices should be evidence-based, addressing linguistic, educational, and social disparities.

- To share successful practices: It is recommended to share success stories and best practices from countries within the region to encourage knowledge sharing and inspire effective strategies for language of instruction policies. Ethiopia can be such an example. Learning from successful experiences and adapting them to local contexts can drive positive change.
- To follow World Bank recommendations. Countries may experience teachers' insufficiency problems, where there is a shortage of teachers who are literate in the students' first languages or are not posted appropriately across the country. Centralized teacher posting systems can result in teachers being sent to work outside their region of language proficiency, leading to teachers' allocation problems. Therefore World Bank recommendations on careful teacher recruitment, selection, support, and matching of student and teacher language competencies for effective L1 instruction seem very relevant.
- To support continued research and action: It is recommended to recognize the ongoing need for analysis and action in the field of language of instruction. It is important to support research efforts, policy development, and the implementation of effective strategies to achieve important educational goals. Staying informed about emerging trends, empirical evidence, and new approaches would allow to contribute to improving language of instruction policies and practices.

These recommendations aim to address the problem, offering suggestions to improve teacher proficiency, language policy implementation, and overall quality of instruction in multilingual environments. More effective teaching in multilingual classrooms would affect millions of students and their teachers in Sub Saharan Africa and would shape the success of future generations and the continent at large.

Annex 1

List of Official and National Languages in Sub Saharan Africa Countries

1. Angola - Portuguese (official) and several national languages.
2. Burkina Faso - French (official) and several national languages, including Mooré, Fulfulde, and Dioula.
3. Democratic Republic of Congo - French (official) and several national languages, including Lingala, Kiswahili, Kikongo, and Tshiluba.
4. Republic of Congo - French (official) and several national languages, including Lingala and Kituba.
5. Equatorial Guinea - Spanish (official) and French, Portuguese, and several indigenous languages.
6. Ethiopia - Amharic, Oromo, Somali, Afar, and Tigrinya
7. Eritrea - Nine official languages: Tigrinya, Tigre, Saho, Kunama, Rashaida, Bilen, Afar, Beni, Amir, and Nera.
8. Gabon - French (official) and several national languages, including Fang, Myene, and Bateke.
9. Guinea - French (official) and several national languages, including Pular, Maninka, and Susu.
10. Ivory Coast - French (official) and several national languages, including Baoulé, Bété, and Bété.
11. Kenya - English (official) and Swahili, as well as several indigenous languages.
12. Lesotho – Sesotho, English,
13. Liberia - English (official) and several indigenous languages.
14. Madagascar – French, Malagasy
15. Mali - French (official) and several national languages, including Bambara, Fulfulde, and Tamasheq.
16. Mauritius – English, French
17. Niger - French (official) and several national languages, including Hausa, Zarma, and Kanuri.
18. Ruanda - Rwanda (Kinyarwanda, Bantu vernacular) French, English
19. Senegal - French (official) and several national languages, including Wolof, Pulaar, and Serer.
20. Seychelles – English, French
21. South Africa - 11 official languages, including Afrikaans, English, isiNdebele, Pedi, Sesotho (Sotho), siSwati (Swazi), Xitsonga (Tsonga), Tswana, Tshivenda (Venda), isiXhosa, isiZulu
22. Swaziland - English (government business conducted in English), siSwati

23. Tanzania - Kiswahili (Swahili), Kiunguju (name for Swahili in Zanzibar), English (primary language of commerce, administration, and higher education)²².

Annex 2.

Table 4. Distribution of teachers across the different levels of the reading proficiency scale by country, PASEC 2019



²² Nations Oline, https://www.nationsonline.org/oneworld/african_languages.htm . Note: the list might not be final.

Table 5. Graphical distribution of teachers by educational level in Sub Saharan Africa, PASEC 2019

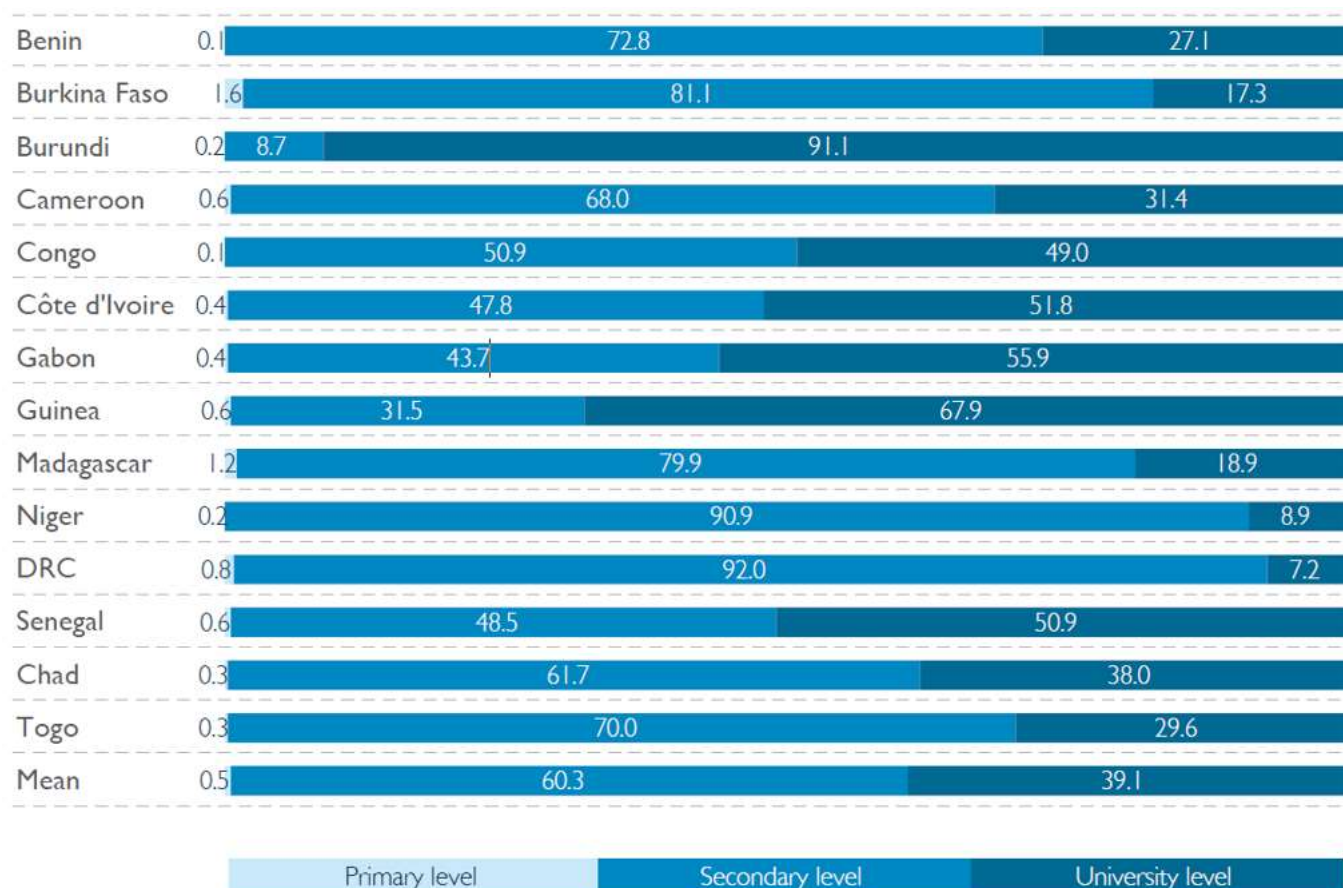


Table 6. Difference between the reading comprehension (on the left) and the mathematics (on the right) scores of teachers who had received additional training and those who had not. Pasec, 2019

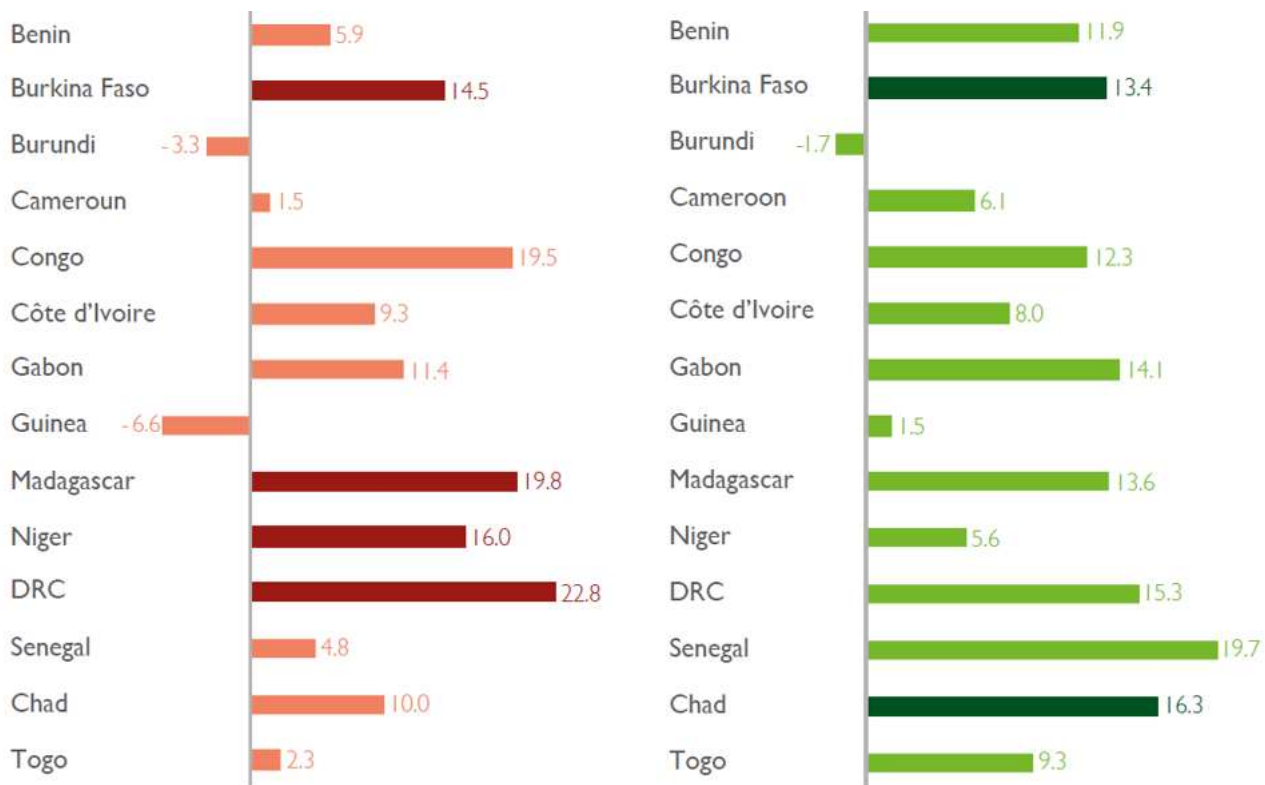


Table 7 Proportion of teachers in Sub Saharan Africa by perceived quality of school management, PASEC 2019

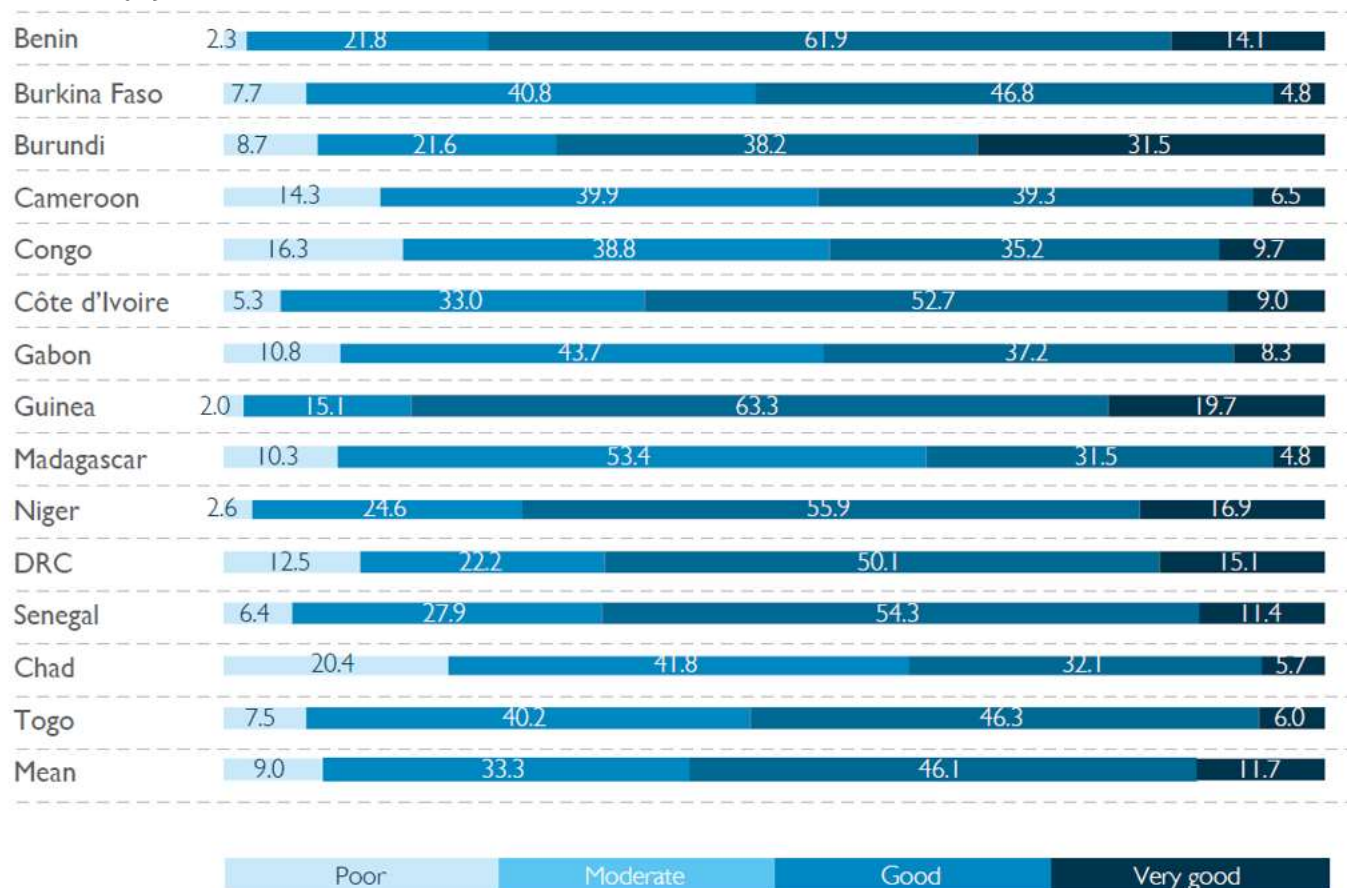


Table 8 Proportion of teachers by perceived quality of relations with the community, PASEC 2019.

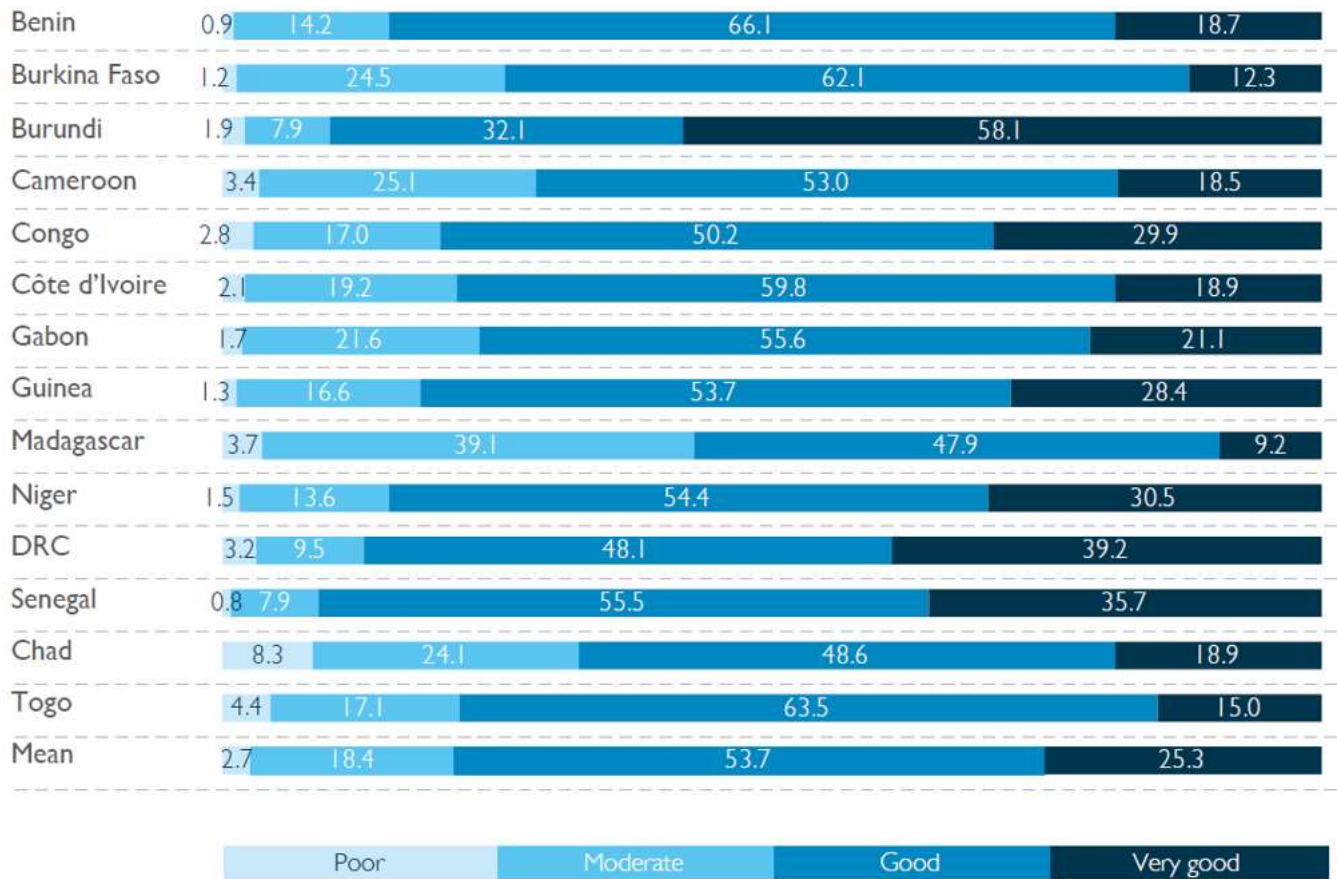
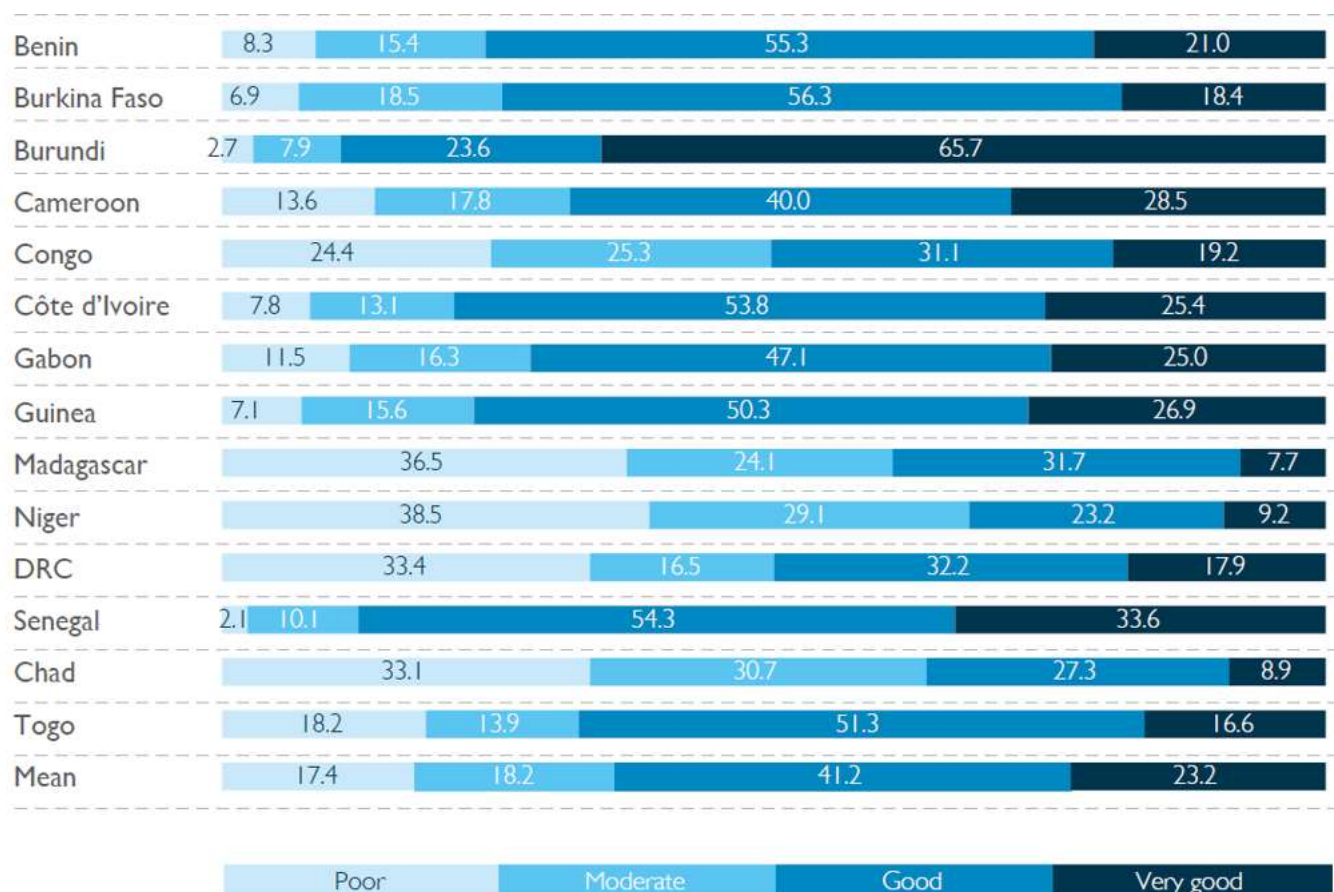


Table 9. Proportion of teachers by perceived satisfaction of regular salary payment, PASEC 2019



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