UNLOCKING DATA

EVIDENCE GAP MAP REPORT

FOUNDATIONAL LEARNING IN CAMEROON

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About this document

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About the Unlocking Data Initiative

The Unlocking Data Initiative is a community of practice that connects African scholars, NGOs, national statistics offices and policymakers for the purpose of improving access to and use of education data. The **Unlocking Data: Scaling Uses and Users of Education Data** project is a collaborative work led by Zizi Afrique Foundation and supported by Education Sub-Saharan Africa, eBase Africa, University of Malawi's Centre for Education Research and Training (CERT). The latter project, which is being implemented in Cameroon, Kenya and Malawi, aims to scale up uses and users of data to address the knowledge gap of how to adaptively scale up the effective use of existing education data by policymakers and researchers in Africa.

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Abbreviations and acronyms

CERT	Centre for Education Research and Training
CSOs	Civil Society Organisations
EGM	Evidence Gap Map
FLAT	Foundational Learning Action Tracker
GPE	Global Partnership for Education
IDRC	International Development Research Centre
JSON	JavaScript Object Notation
KIX	Knowledge Innovation Exchange
MINEDUB	Ministry of Basic Education
SEL	Social and Emotional Learning
SDG	Sustainable Development Goals
TTF	Teacher Task Force

1. Introduction

Foundational learning, which includes basic literacy, numeracy, and socio-emotional skills, is the foundation for a life of learning. Foundational learning skills also foster social and emotional growth, cognitive development, and civic engagement. These skills are critical, helping today's children become tomorrow's productive people (⇡World Bank, 2024)

In the context of Cameroon, foundational learning also includes competencies such as oral communication, problem-solving, and basic socio-emotional skills, which are critical for navigating bilingual and resource-constrained educational environments.

As a cornerstone of individual and societal development, it enables children to progress through education systems, engage in economic activities, and participate in civic life. In Cameroon, where educational disparities pose significant challenges, strong foundational skills are vital for reducing dropout rates, improving secondary education outcomes, and fostering equitable opportunities, particularly for marginalised groups such as girls, linguistic minorities, and students with disabilities. Evidence suggests that early mastery of literacy and numeracy enhances cognitive development, boosts self-confidence, and correlates with higher lifetime earnings (⇡Hanushek & Woessmann, 2008). For policymakers, investing in foundational learning yields high returns by addressing learning poverty, aligning with global education goals, and supporting sustainable economic growth in low- and middle-income countries like Cameroon.

1.1. Background

Children with strong foundational skills are more likely to progress through education systems, achieve higher academic outcomes, and contribute productively to society (⇡World Bank, 2024). In low- and middle-income countries (LMICs) like Cameroon, foundational learning is a starting point for many to reduce learning poverty, promote equity, and align with global education goals, such as Sustainable Development Goal (SDG) 4 for inclusive and quality education.

Despite significant efforts to expand access to education, Cameroon faces persistent challenges in achieving universal foundational learning outcomes. The country's education system operates in a complex context shaped by its bilingual structure (English and French), regional crises, and socio-economic disparities. ⇡UNICEF (2024) reports that over 1.5 million school-age children require urgent educational assistance due to ongoing conflicts in the Northwest, Southwest, and far North regions. These crises have led to school closures, teacher shortages, and disrupted attendance, severely impacting learning progress. In conflict-affected areas, children face increased risks of dropout, with girls and marginalised groups particularly vulnerable due to security concerns and cultural barriers (⇡World Bank, 2024).

Nationally, inadequate infrastructure, including insufficient classrooms, teaching materials, and learning resources, increases foundational learning deficits. Gender

disparities remain a significant concern, with girls less likely to complete primary education or achieve proficiency in literacy and numeracy compared to boys (↑UNESCO, 2023). Socio-economic barriers, such as poverty and rural-urban divides, further limit access to quality education, particularly in remote areas where schools are under-resourced. The bilingual education system, while a strength in promoting linguistic diversity, poses additional challenges. Instructional materials and teacher training are often unevenly distributed between English- and French-speaking schools, leading to disparities in learning outcomes. For instance, French-speaking regions, which constitute the majority of the population, often receive more resources, while English-speaking regions face systemic underinvestment (↑UNICEF, 2024).

Findings from ↑UNESCO (2023) underscore the severity of learning deficits across sub-Saharan Africa, with four out of five children aged 10 unable to read and understand a basic text. In Cameroon, national assessments indicate similar trends, with significant proportions of primary school students failing to meet minimum proficiency levels in literacy and numeracy (↑World Bank, 2024). Post-COVID-19 learning losses have compounded these challenges, as prolonged school closures disrupted foundational skill development, particularly for early-grade learners. The Foundational Learning Action Tracker (FLAT) highlights promising national strategies to address these gaps, including structured pedagogy, catch-up programmes, targeted instruction, and community-based learning initiatives (↑UNESCO, 2023). However, implementation remains uneven due to limited funding, inadequate teacher training, and weak coordination between national and regional education authorities.

The persistent challenges in Cameroon's education system underscore the need for evidence-informed strategies to improve foundational learning outcomes. While national policies, such as curriculum reforms and early childhood education programmes, have shown promise, their effectiveness varies across contexts due to differences in implementation fidelity and resource availability. The Unlocking Data Project's Evidence Gap Map (EGM) seeks to address this by systematically mapping impact evaluations and gaps in foundational learning and numeracy interventions in Cameroon. By identifying evidence clusters like policy system interventions, early childhood intervention, and gaps such as teacher professional development, built environment and technology-enabled learning, the EGM provides a critical tool for policymakers, educators, and researchers to prioritise interventions and allocate resources effectively.

The EGM also highlights the importance of addressing systemic inequities, such as gender and linguistic disparities, which are often underexplored in existing research. For instance, the predominance of English-language studies despite Cameroon's largely French-speaking population points to a need for bilingual research that reflects the country's linguistic diversity. Similarly, the underrepresentation of female authors in foundational learning interventions highlights the need for greater gender equity in academic contributions. By synthesising evidence and identifying these gaps, the EGM facilitates targeted investments in interventions that can accelerate foundational learning, particularly for marginalised groups affected by conflict, poverty, or exclusion.

1.2. Study objectives and questions

This Evidence Gap Map (EGM) is a core component of the Unlocking Data Initiative, a collaborative effort to scale the use and users of education data across Cameroon, Kenya, and Malawi. By mapping the evidence landscape for foundational learning in Cameroon, the EGM directly supports the initiative's goal of addressing knowledge gaps and enhancing evidence-based policymaking and research to improve educational outcomes. It provides a critical tool for stakeholders to identify, access, and prioritise evidence, fostering data-driven strategies that align with Cameroon's national education priorities and the broader regional objective of advancing foundational learning.

The objectives for this report are:

1. To identify, describe, and synthesise evidence on foundational learning in Cameroon.
2. To identify primary and synthesis evidence gaps.
3. To facilitate the use of existing evidence by making it accessible to stakeholders.

The research questions for this report are:

1. What is the extent and characteristics of empirical evidence on foundational learning interventions in Cameroon?
2. What are the major primary and synthesis evidence gaps?
3. Which intervention/outcome areas should be prioritised for research?

1.3. How to use the EGM

The EGM provides an interactive platform for stakeholders to explore evidence by intervention, outcome, and other filters (e.g., language, intervention). Decision makers can access systematic reviews for robust evidence or individual impact evaluations for context-specific insights. The map identifies gaps to guide research prioritisation.

2. Defining the scope of interventions

The EGM is based on a framework that categorises foundational learning interventions and outcomes, adapted from global education research and Cameroon's context. The research team conducted stakeholder consultations during a policy event and a workshop with representatives from the Ministry of Basic Education (MINEDUB), civil society organisations (CSOs), and local educators, researchers, and other stakeholders to identify priority areas for foundational learning in Cameroon. These consultations highlighted the need to address systemic challenges, such as weak early grade pedagogy, language barriers, teacher shortages, and gaps in assessment and inclusion.

The categories for these interventions and outcomes were developed through a synthesis of information. This synthesis drew upon a quick online search of reports from key international and regional organisations, including the World Bank, UNICEF, Global Partnership for Education (GPE), the PAL Network, UNESCO, and FCDO. This external evidence was then critically integrated with insights gained from expert consultations and, crucially, from stakeholder priorities identified during engagement sessions. While this approach provided a robust foundation, it is important to note that the resulting list of interventions and outcomes is not exhaustive.

2.1. Interventions of interest

Table 1 outlines the intervention categories and subcategories included in the Evidence Gap Map (EGM) for foundational learning in Cameroon. It details specific interventions and provides clarifications and examples to illustrate their application in the Cameroonian context, guiding stakeholders in understanding the scope of evidence synthesis.

Table 1. *Framework of foundational learning interventions in Cameroon*

Intervention Category	Intervention	Clarifications and Examples
Teacher Development	Teacher Professional Development	In-service training programmes, workshops on pedagogical skills, and mentoring for teachers to enhance literacy and numeracy instruction.
Instructional Approaches	Structured Pedagogy and Teaching at the Right Level	Curriculum-aligned teaching materials, scripted lesson plans, and adaptive instruction tailored to students' learning levels (e.g., Teaching at the Right Level programmes).
Language	Language of Instruction and Multilingual Education	Bilingual or multilingual instruction models, use of mother tongue in early grades, transitioning to official languages (English/French).
Remedial Learning	Remedial and Accelerated Learning programmes	Catch-up classes, after-school tutoring, or accelerated curricula to address learning gaps, especially post-COVID recovery.
Technology	Technology-Enabled Learning	Use of tablets, educational apps, online platforms, or radio-based instruction to support foundational learning (e.g., digital maths games).
Community Engagement	Parental Engagement and Community Involvement	Parent literacy workshops, community reading programmes, or school management committees to support foundational learning.

Early Childhood	Early Childhood Intervention	Kindergarten or pre-primary programmes focusing on early literacy and numeracy skills, and play-based learning.
Health and Nutrition	School Feeding and Health Interventions	School meal programmes, deworming, or health screenings to improve attendance and cognitive development for foundational learning.
Infrastructure	Built Environment	Improvements to classrooms, libraries, or sanitation facilities to enhance learning environments.
Policy	Policy and System-Level Interventions	National curriculum reforms, teacher hiring policies, or funding allocations to strengthen foundational learning outcomes.
Socio-Emotional Learning	Social and Emotional Learning (SEL) Interventions	programmes fostering resilience, self-regulation, or teamwork to support foundational learning (e.g., SEL curriculum integrated into lessons).
Behavioural	Behavioural Interventions	Positive reinforcement, classroom management strategies, or incentives to improve student engagement and behaviour.
Other Interventions	Others	Any foundational learning interventions not covered above, such as public-private partnerships or innovative financing for education.

2.2. Outcomes of interest

Table 2 presents the outcome categories and subgroups assessed in the EGM for foundational learning in Cameroon. It includes example indicators to clarify how each outcome is measured, providing a comprehensive framework for evaluating the impact of interventions on educational progress.

Table 2. *Framework of foundational learning outcomes in Cameroon*

Goal	Outcome Group	Example Indicators
Foundational Skills	Literacy Skills	Reading comprehension scores, fluency rates, writing proficiency, and vocabulary development
Foundational Skills	Numeracy Skills	Proficiency in addition, subtraction, multiplication, division; problem-solving abilities, number sense
Holistic Development	Socio-Emotional & behavioural Outcomes	Self-regulation, resilience, peer interaction, classroom behaviour, emotional well-being
Teacher Quality	Teacher Knowledge & Instructional Practices	Teacher understanding of foundational learning pedagogy, use of evidence-based teaching strategies, and classroom management skills
Community Involvement	Parental & Community Engagement	Parental participation in literacy workshops, community-led reading programmes, and school committee involvement

Inclusivity	Equity & Inclusion	Participation rates of girls, students with disabilities, or linguistic minorities; gender parity in literacy outcomes
Systemic Improvement	System-Level Outcomes & Policy Outcomes	Adoption of foundational learning-focused curricula, national assessment improvements, and teacher training policy changes
Student Engagement	Engagement and Classroom Participation	Student participation in class activities, motivation levels, interaction with peers and teachers
School Access	Enrolment, Attendance, and Retention	Enrolment rates, daily attendance percentages, dropout rates, and retention through primary grades
Additional Outcomes	Others	Critical thinking, creativity, leadership skills, student confidence, and school readiness

3. Methods

The study employed a mixed-methods approach, integrating both qualitative and quantitative research techniques. The approaches included desk reviews, online data searches, systematic literature reviews, and document reviews. Also, the study employed EPPI-Reviewer[1] to code the various studies discovered during the search, and also used the EPPI-Mapper[2] to produce the evidence gap map for Cameroon. The initial search generated total hits of 677 papers, which were screened by two independent researchers and a third reviewer resolved any discrepancies.

3.1. Search strategy

For details on how the various studies were searched and screened for in this report, please refer to the Cameroon Situational Analysis Report on Exploring Foundational Learning Data and Knowledge Ecosystem in Sub-Saharan Africa (↑Pambe et al., 2025).

3.2. Study identification and import

Following an extensive systematic search of academic databases, grey literature sources (including local journals and university libraries), and other relevant platforms, we identified a comprehensive set of studies on foundational learning in Cameroon. To manage and reference these studies effectively, we imported the studies into Zotero, a robust reference management software. We did this using the Zotero Google Chrome extension. Zotero facilitated the organisation of study metadata, including titles, authors, publication details, and abstracts. From Zotero, we exported the studies into a RIS (Reference Information System) file, which consolidated all relevant bibliographic information into a standardised format compatible with subsequent analysis tools.

3.3. Study classification using EPPI-Reviewer

The RIS file was then imported into EPPI-Reviewer, a web-based systematic review software designed for evidence synthesis and mapping. EPPI-Reviewer enabled us to systematically classify the studies based on predefined criteria, ensuring consistency and precision in the coding process. To achieve this, we developed a comprehensive coding framework within EPPI-Reviewer, which organised the studies into primary categories and subcategories. The primary categories included:

- **Gender of First Author**: To analyse gender disparities in authorship, we coded studies based on the gender of the first author (male, female).

- **Focus of Study**: This category captures the primary focus of each study, such as literacy, numeracy, socio-emotional outcomes, or literacy and numeracy.

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[1] See https://eppi.ioe.ac.uk/eppireviewer-web/home. Retrieved on 23 June 2025.

[2] See https://eppimapper.digitalsolutionfoundry.co.za/. Retrieved on 23 June 2025.

- **Language**: Studies were classified by publication language, English or French, to assess alignment with Cameroon's bilingual context.

- **Source of Study**: We categorised studies by publication outlet, including indexed journals, local journals, university libraries, or civil society organisation (CSO) repositories.

- **Type of Study**: Studies were classified by methodology, such as impact experimental, quasi-experimental, behavioural or cross-sectional, case studies, qualitative analyses, systematic review and meta-analysis, and longitudinal and cohort.

- **Outcomes**: We had outcomes that included Literacy Skills (Reading & Writing), Numeracy Skills, Socio-Emotional & behavioural Outcomes, Teacher Knowledge & Instructional Practices, Parental & Community Engagement, Equity & Inclusion, System-Level Outcomes & Policy Outcomes, Engagement and Classroom Participation, Enrolment, Attendance and Retention, and others.

- **Interventions**: We were able to identify the following interventions; teachers professional development, structured pedagogy and teaching at the right level, language of instruction and multilingual education, remedial and accelerated learning programmes, technology enabled learning, parental engagement and community involvement, early childhood intervention, school feeding and health interventions, built environment, policy and system-level interventions, social and emotional learning intervention, behavioural interventions and others.

Each study was manually coded by two trained research assistants based on these categories and subcategories. To ensure reliability, a subset of studies underwent double-coding, with discrepancies resolved through consensus or consultation with senior researchers. This rigorous coding process enabled a nuanced understanding of the evidence landscape, highlighting clusters and gaps in the research.

3.4. Data export and JSON file generation

Upon completion of the coding process, the classified data was exported from EPPI-Reviewer as a JSON (JavaScript Object Notation) file. The JSON file encapsulated the coded data in a structured format, preserving the relationships between categories, subcategories, and individual studies. This file served as the foundation for generating the visual representation of the EGM, ensuring that all coded attributes were accurately transferred to the mapping stage.

3.5. Evidence Gap Map visualisation using EPPI-Mapper

The JSON file was uploaded to EPPI-Mapper, a specialised tool for creating interactive evidence gap maps. EPPI-Mapper facilitated the visualisation of the evidence base by mapping studies across a matrix of interventions and outcomes, with additional filters for categories such as authorship gender, language, and methodology. The process of generating the EGM involved several steps:

- **Matrix Configuration**: We defined the EGM matrix axes, with interventions and outcomes. This structure aligned with the conceptual framework outlined in Section 3.1 of the EGM report.

- **Data Mapping**: EPPI-Mapper populated the matrix with studies based on the coded data from the JSON file, visually representing evidence clusters (areas with many studies) and gaps (areas with few or no studies).

- **Filter Integration**: Interactive filters were incorporated to allow users to explore the EGM by specific attributes, such as the gender of the first author, language, or study type. This functionality enhances the usability of the EGM for stakeholders, enabling tailored analyses.

- **Quality Assurance**: The generated EGM underwent validation to ensure that all studies were accurately represented and that the visualisation aligned with the coded data. Any discrepancies were addressed by revisiting the JSON file or recording studies as needed.

The resulting EGM is hosted on an interactive online platform, providing stakeholders with a user-friendly interface to explore the evidence base. The map visually highlights the distribution of studies, facilitating the identification of well-researched areas (e.g., policy interventions, literacy outcomes) and underexplored areas (e.g., teacher professional development, numeracy outcomes).

3.6. Implications of the methodology

The use of Zotero, EPPI-Reviewer, and EPPI-Mapper ensured a systematic, transparent, and replicable process for developing the EGM. By leveraging these tools, we achieved a high level of precision in study management, classification, and visualisation. The coding framework allowed for a granular analysis of the evidence base, revealing critical insights into gender disparities, linguistic biases, and methodological preferences in foundational research in Cameroon. The JSON file export and EPPI-Mapper visualisation further enhanced the accessibility and utility of the EGM, enabling stakeholders to make evidence-informed decisions.

This methodology can be adapted for future EGMs in other contexts or sectors, provided that the coding framework is tailored to the specific research questions and evidence base. The process also underscores the importance of rigorous data management and quality assurance to ensure the reliability of evidence maps. Figure 1 below presents the evidence gap map on foundational[3] learning in Cameroon.

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[3] See https://unlockingdata.africa/wp-content/uploads/2025/05/cameroon_EGM_on-_foundational_learning.html. Also available at https://egm-fln-cm.ebaseafrica.org/. Retrieved on 3 June 2025

Figure 1. *Visual representation of the EGM on foundational learning in Cameroon*
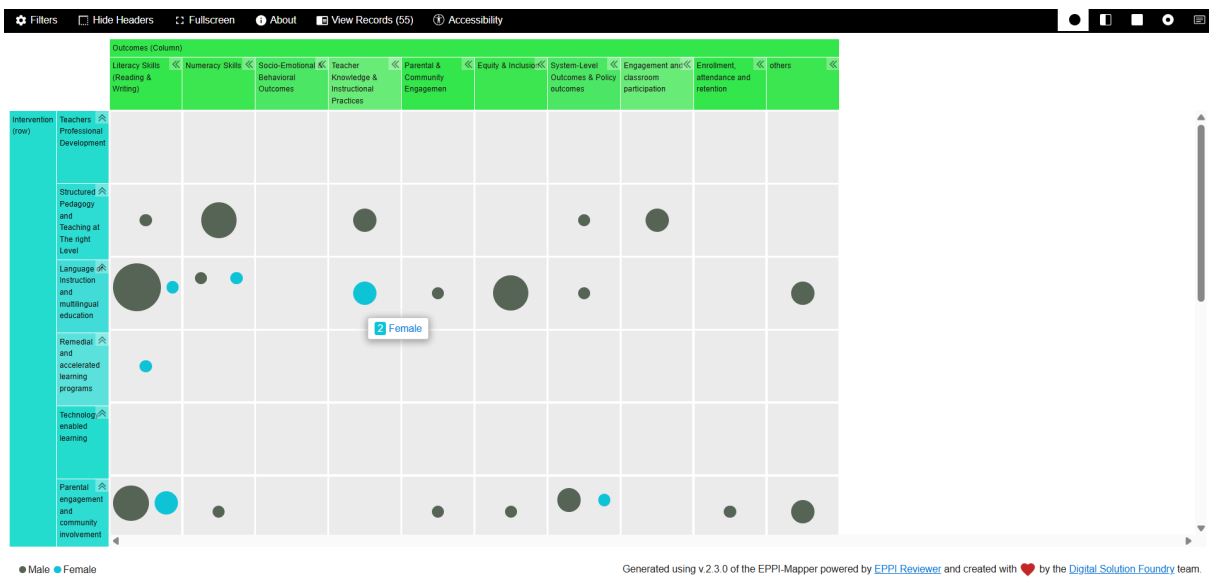
4. Findings and discussion

The EGM includes 55 studies. The evidence base has grown steadily from 1983 to 2024, with a slowdown possibly due to ongoing conflicts and COVID-19 disruptions. The following link leads to the interactive Evidence Gap Map.[4]

4.1. Characteristics of the evidence base

4.1.1. Intervention gap

The EGM reveals significant gaps in the types of interventions studied in Cameroon for foundational learning.

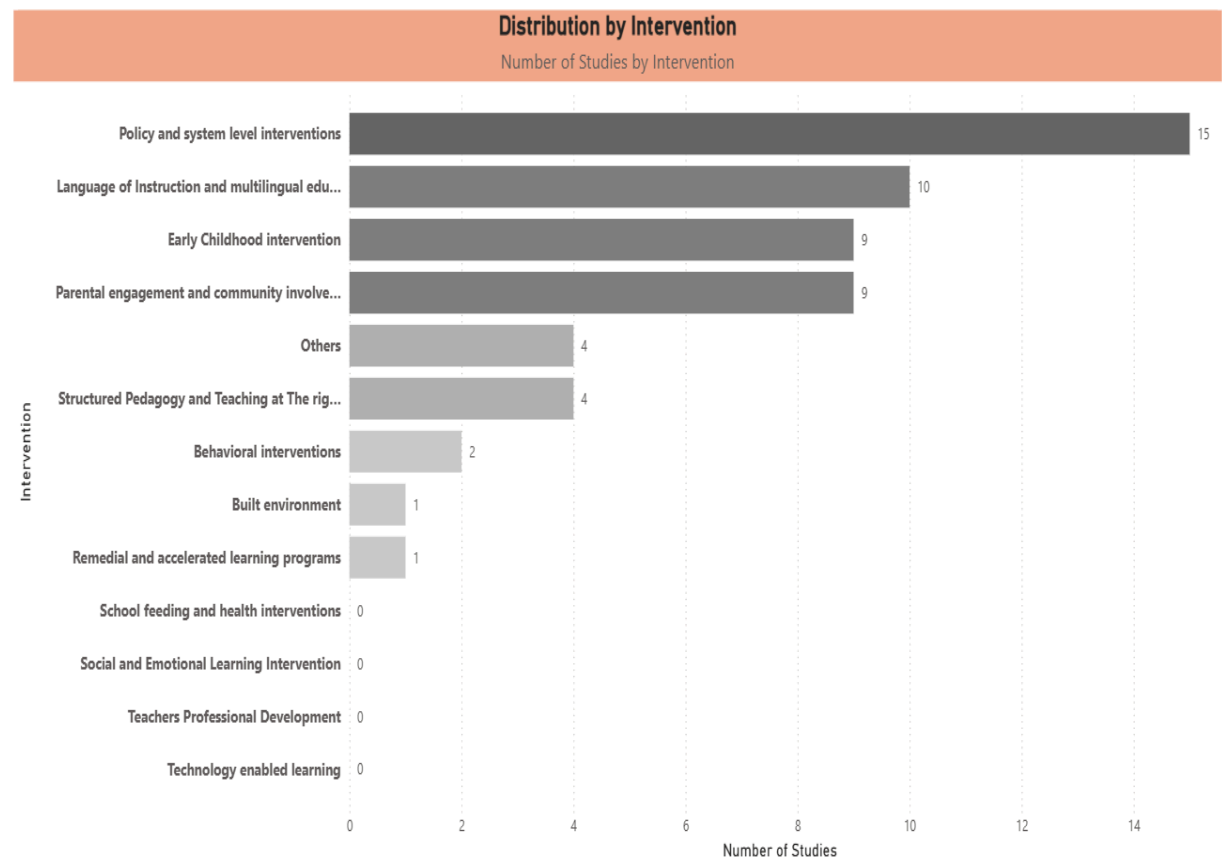**Figure 2**. *Distribution of intervention gaps of EGM in Cameroon*

Figure 2 shows that **limited interventions** were identified in the following critical areas, especially focusing on improving FLN outcomes: school feeding and health interventions, social and emotional learning interventions, teachers' professional development, and technology-enabled learning.

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[4] See
https://unlockingdata.africa/wp-content/uploads/2025/05/cameroon_EGM_on-_foundational_learning.html. Also available at https://egm-fln-cm.ebaseafrica.org/. Retrieved on 3 June 2025

4.1.2. Outcome gaps

Figure 3 below shows a clear picture of which outcomes have been prioritised and those that have been neglected from the studies on FL in Cameroon.

Figure 3. *Distribution of outcomes gaps in foundational learning in Cameroon*
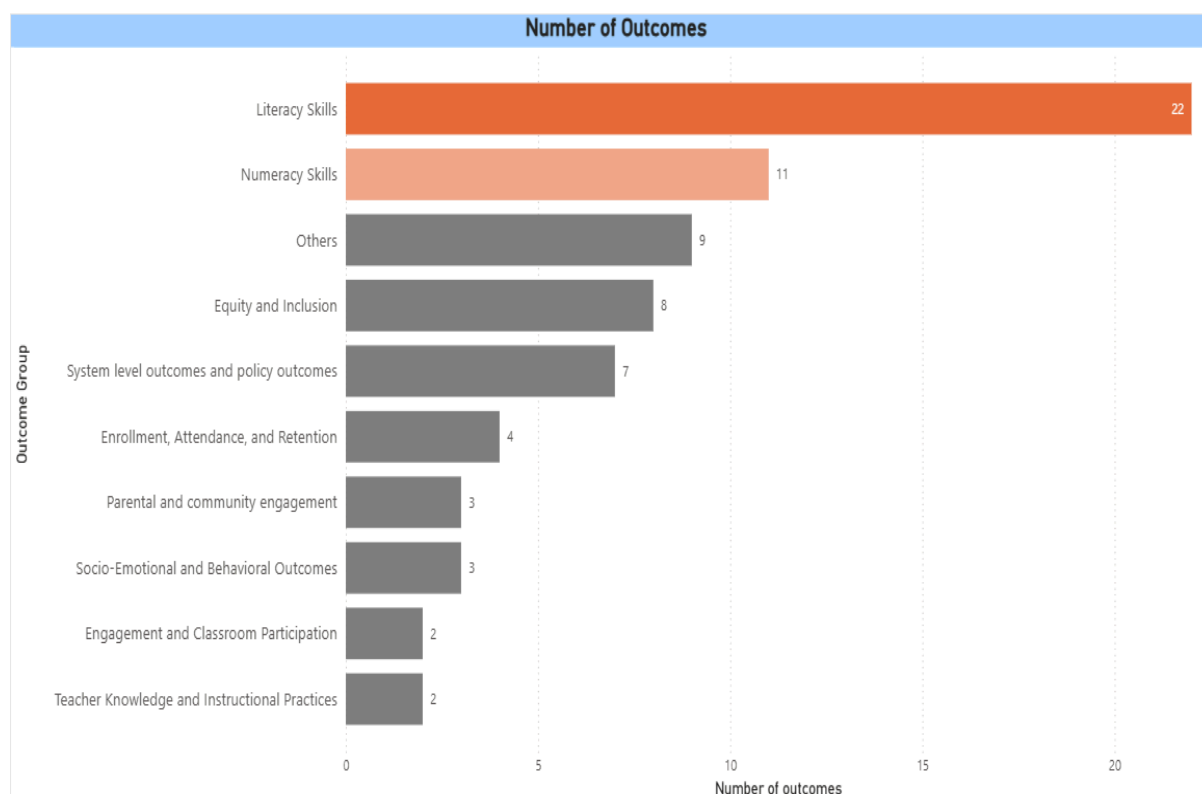
Literacy skills dominate the outcomes of the studies, with 22, while the numeracy skills outcome is just 11. This signifies a lack of focus on numeracy, which plays a critical role in the foundational learning of a child. Other studies on child development, not directly linked to foundational learning, had nine outcomes. Outcomes on parental engagement and socio-emotional behaviour had just three from all the studies, while engagement and classroom participation, and teacher knowledge and instructional practices were the outcomes of just two studies.

4.1.3. Gender and source of study gaps

The gender distribution is very uneven, and this disparity is highly visible throughout the entire gap map as seen in Table 3 below.

Table 3. *Distribution of gender and source of studies gaps in foundational learning in Cameroon.*

Category	Total Studies	Male Authors	Female Authors
Overall Studies	55	38	17

From Table 3, we can see that most of the first authors of the 55 studies are male, with 38 compared to 17 female authors.

4.1.4. Language gaps

Cameroon is a bilingual country, with French (the most dominant) and English being the two main official languages. However, there are huge gaps in studies carried out in both languages, as seen in Table 4 below.

Table 4. *Language and source of studies distribution gaps in foundational learning in Cameroon*

Category	Total Studies	English	French
Overall Studies	55	49	6
Indexed Journal	37	34	3
Local Journals	6	5	1
University library	6	4	2
CSOs Repositories	6	6	0

For language distribution, 49 of the totals were published in English compared to just six, published in French. No French studies came from CSO repositories.

4.1.5. Source of study gaps

There were four main sources of studies: indexed journals, CSOs, local journals, and university libraries. The gaps identified in the evidence gap map can be seen in Figure 4 below.

Figure 4. *Distribution of sources of study gaps in foundational learning in Cameroon*
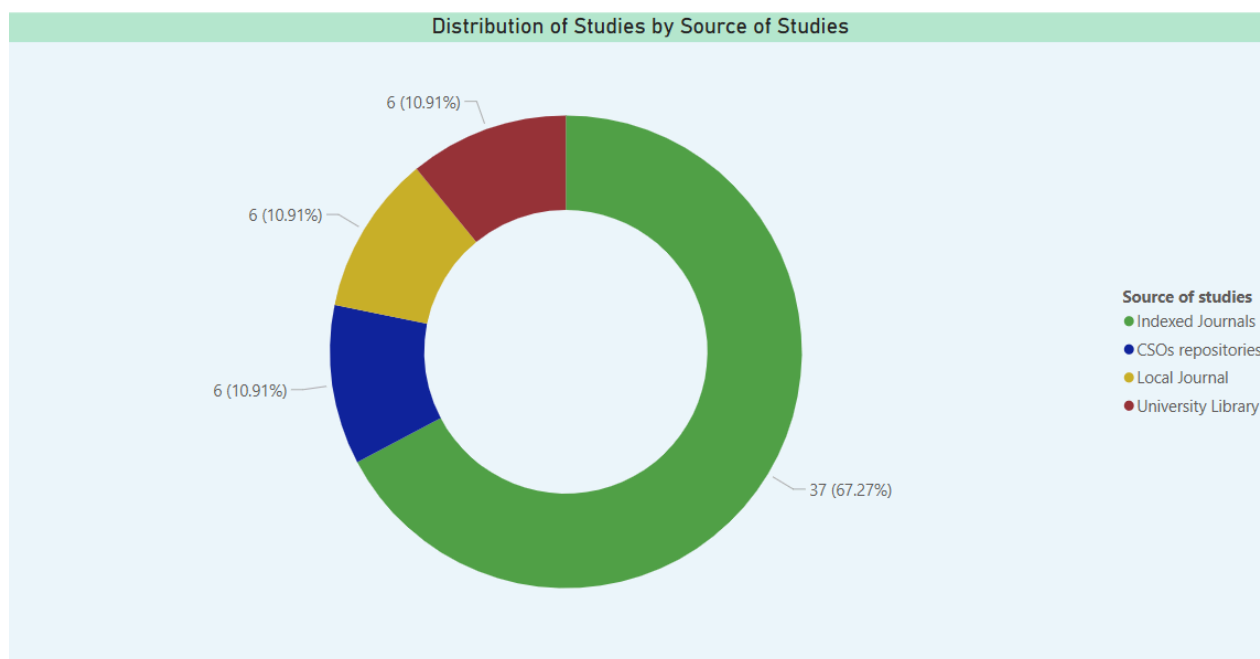
In Figure 4, out of the total 55 studies, 67.27% came from indexed journals, with 37 of the studies, while the rest came evenly from CSO repositories, local journals and university libraries, with 6% each.

4.1.6. Study type gaps

Table 5 below shows the gaps in the various study types, which include behavioural or cross-sectional studies, case studies, qualitative analysis, experimental or quasi-experimental studies, and longitudinal or cohort studies.

Table 5. *Distribution by study type, gaps in foundational learning in Cameroon*

Study Type	Total Studies	Male Authors	Female Authors	Proportion of Male Authors (%)	Proportion of Female Authors (%)
Behavioural or Cross-Sectional Studies	22	14	8	36.84	47.02
Case Studies	17	11	6	28.94	35.29
Qualitative Analysis	9	7	2	18.42	11.76
Experimental and Quasi-Experimental Studies	4	4	0	10.53	0
Longitudinal or Cohort Studies	3	2	1	2.26	5.88
Systematic Review and Meta-Analysis	0	0	0	0	0
Expert Opinion	0	0	0	0	0

From Table 5 above, we can see that most female authors conduct behavioural or cross-sectional studies (47.06%) and also case studies (35.29%) when compared to the male authors with 36.84% and 28.95% respectively. Male authors dominate qualitative analysis with 18.42% while just 11.76% of female authors use this method. Of significant note is that 0% of female authors used experimental or quasi-experimental methodology compared to 10.53% of male authors. Both genders equally make use of longitudinal or cohort studies, with 5.25% male and 5.88% female. None of the authors used systematic review and meta-analysis or expert opinion methods.

5. Limitations

The bilingual nature of Cameroon's education system poses challenges to the generalisability of findings. The overwhelming dominance of English-language studies (49 out of 55) compared to French (6 studies) may skew the evidence toward regions or communities where English is more prevalent, potentially underrepresenting the experiences of the majority French-speaking population. This linguistic bias could affect the applicability of interventions across diverse linguistic contexts, necessitating further research to ensure inclusivity.

Secondly, resource constraints and regional disparities in Cameroon, including conflict-affected areas like the North West, South West, and Far North, may have influenced the availability and quality of studies included in the EGM. The disruption of schooling for over 1.5 million children, as noted by ⇧UNESCO (2023), likely reduced the volume of recent research, particularly post-2020, where a slowdown in evidence production was observed. This gap may not fully reflect current needs or emerging interventions, limiting the EGM's temporal relevance.

The absence of systematic reviews and meta-analyses (0 studies) indicates a lack of synthesised evidence, which could have provided a higher level of rigour and generalisation. Evidence gaps identified in the EGM do not necessarily imply ineffective interventions but rather highlight areas where evaluation is lacking. These limitations suggest that while the EGM offers a robust starting point, its findings should be interpreted cautiously and validated through targeted research to enhance their utility for decision-making in Cameroon's complex educational landscape.

6. Conclusions and recommendations

The Evidence Gap Map (EGM) on foundational learning in Cameroon reveals a research landscape with notable strengths and persistent challenges. The concentration of studies on policy system-level interventions (15 studies) and early childhood interventions (10 studies) demonstrates a strategic focus on systemic reforms and early education, which are pivotal for building a strong foundational learning foundation. However, significant gaps in teacher professional development, technology-enabled learning, school feeding, built environment improvements, and social and emotional learning (SEL) underscore missed opportunities to address critical determinants of educational quality and equity. The underrepresentation of numeracy outcomes (11 studies) and socio-emotional outcomes (3 studies), alongside disparities in authorship (38 male vs. 17 female) and language (49 English vs. 6 French), further highlights systemic inequities that require urgent attention.

6.1. Recommendations for stakeholders

For Decision Makers

- **Address intervention gaps through targeted investments**: To counter the absence of studies on teacher professional development, technology-enabled learning, school feeding, and SEL, prioritise funding for pilot programmes in these areas. For example, implement in-service teacher training focused on numeracy instruction to address the numeracy outcome gap and leverage radio-based learning in conflict-affected regions to overcome infrastructure deficits, as highlighted in the report's limitations.

- **Enhance inclusivity in crisis-affected regions**: Respond to the limitation of reduced research in conflict zones by collaborating with local communities to design context-specific interventions, such as community-based catch-up programmes and distance learning platforms, which can mitigate the educational impact on over 1.5 million affected children. This also addresses the equity and inclusion outcome gap by prioritising girls and marginalised groups.

- **Establish robust monitoring systems:** To overcome the lack of recent evidence post-2020, develop monitoring and evaluation frameworks for new initiatives, generating real-time data on understudied interventions, such as built environment improvements. This ensures the EGM remains relevant despite conflict-related disruptions noted in the limitations.

For Researchers

- **Fill critical research gaps:** Target the identified intervention gaps by conducting studies on teacher professional development, technology-enabled learning, and SEL, which are critical for addressing Cameroon's teacher shortages and resource constraints. Similarly, increase research on numeracy and

socio-emotional outcomes to balance the literacy-heavy evidence base, enhancing holistic learning strategies.

- **Promote bilingual and gender-inclusive research:** To address the linguistic and gender disparity in authorship, prioritise bilingual research that reflects Cameroon's French-speaking majority and support female researchers through grants and mentorship. This responds to the limitation of skewed generalisability and aligns with equity goals.

- **Conduct systematic reviews for evidence synthesis:** Tackle the absence of systematic reviews and meta-analyses by synthesising existing evidence in well-researched areas like policy interventions. This strengthens the evidence base's rigour, addressing the limitation of unsynthesised evidence, and enables female researchers to lead high-impact studies, countering male dominance in authorship.

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These references are available digitally in our evidence library at
https://docs.edtechhub.org/lib/7Z4NBDB7

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