

Mapping African Research on Foundational Literacy and Numeracy in Sub-Saharan Africa

PEER-REVIEWED PUBLICATIONS IN INTERNATIONAL AND FRANCOPHONE DATABASES

Why is FLN important?

Foundational Literacy and Numeracy (FLN) are essential skills for achieving broader educational objectives for individuals and societies. Yet, children in sub-Saharan Africa (SSA) are five times less likely to achieve the minimum reading proficiency by the end of primary school compared to children in other regions of the world.

Education Sub Saharan Africa (ESSA), the REAL Centre (University of Cambridge), and the Bill & Melinda Gates Foundation are collaborating to map African research efforts on improving the foundational learning of primary school-aged children in SSA.

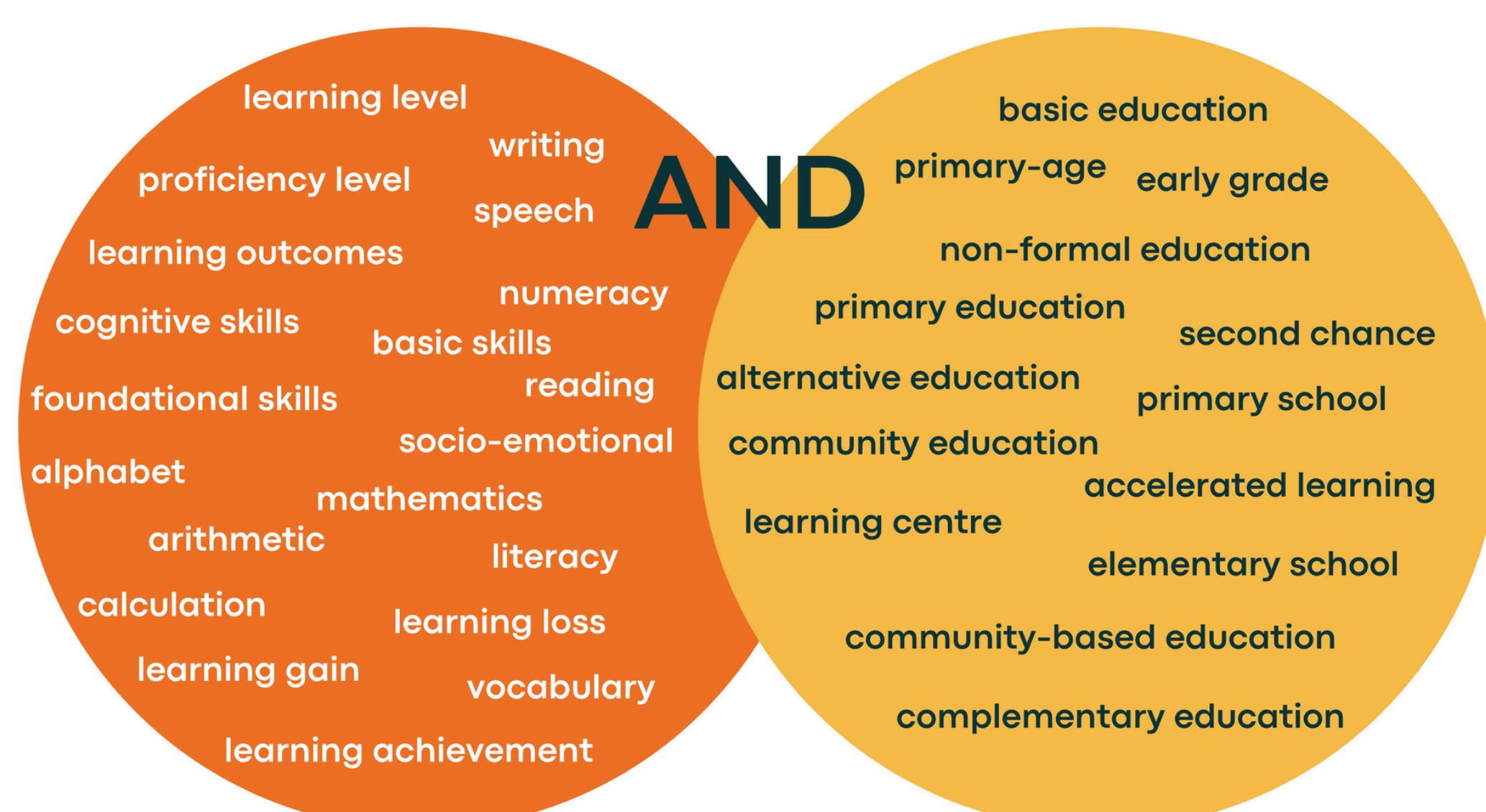
Searching for FLN Publications

How do we define FLN publications?

Studies that examine reading, writing, and numeracy skills acquired and practiced within the education system. These foundational skills can be attained in primary school settings or through alternative pathways, including complementary basic education programmes.

- **Data Sources:** Scopus, Web of Science, Dimensions, Francophone databases CAIRN, Open Edition. Additional searches in specific Francophone journals and AERD.
- **Time and Geographic Frame:** From 2015 to 2023 across 48 SSA countries (1).
- **Authorship criterion:** Publications (co-)authored by at least one SSA-based African researcher.

Keywords of the search string



What did we find?

Consistent rise in FLN publications but limited to a few SSA countries

- **Increase** from a total number of **30** FLN publications in 2015 to **78** in 2023. However, the total number of identified FLN publications remains limited with **only 381 publications** in the entire dataset.
- Highest number of publications were identified from Kenya, Uganda, Nigeria, Ethiopia, Tanzania, and Malawi.
- In-country mapping in Ghana, Kenya, Tanzania and Senegal show **higher number of non-published or locally-published research outputs** on FLN.

Less collaboration across SSA and female researchers are underrepresented

- African researchers collaborate predominantly **within-country** collaborations (73% of identified publications), fewer **international** collaborations (49%), and **little across SSA countries** (16%).
- Notable **gender disparity** among SSA-based researchers (36% women, 64% men), with Ethiopia having the lowest number of female researchers (8%).

Publications with open access but low impact

- Half of publications are open access but **mostly published in lower-impact journals** <0.4 SJR (2).
- **Top 10 cited publications mostly involve collaboration with scholars based in the global North** and 3 are interdisciplinary FLN and health.

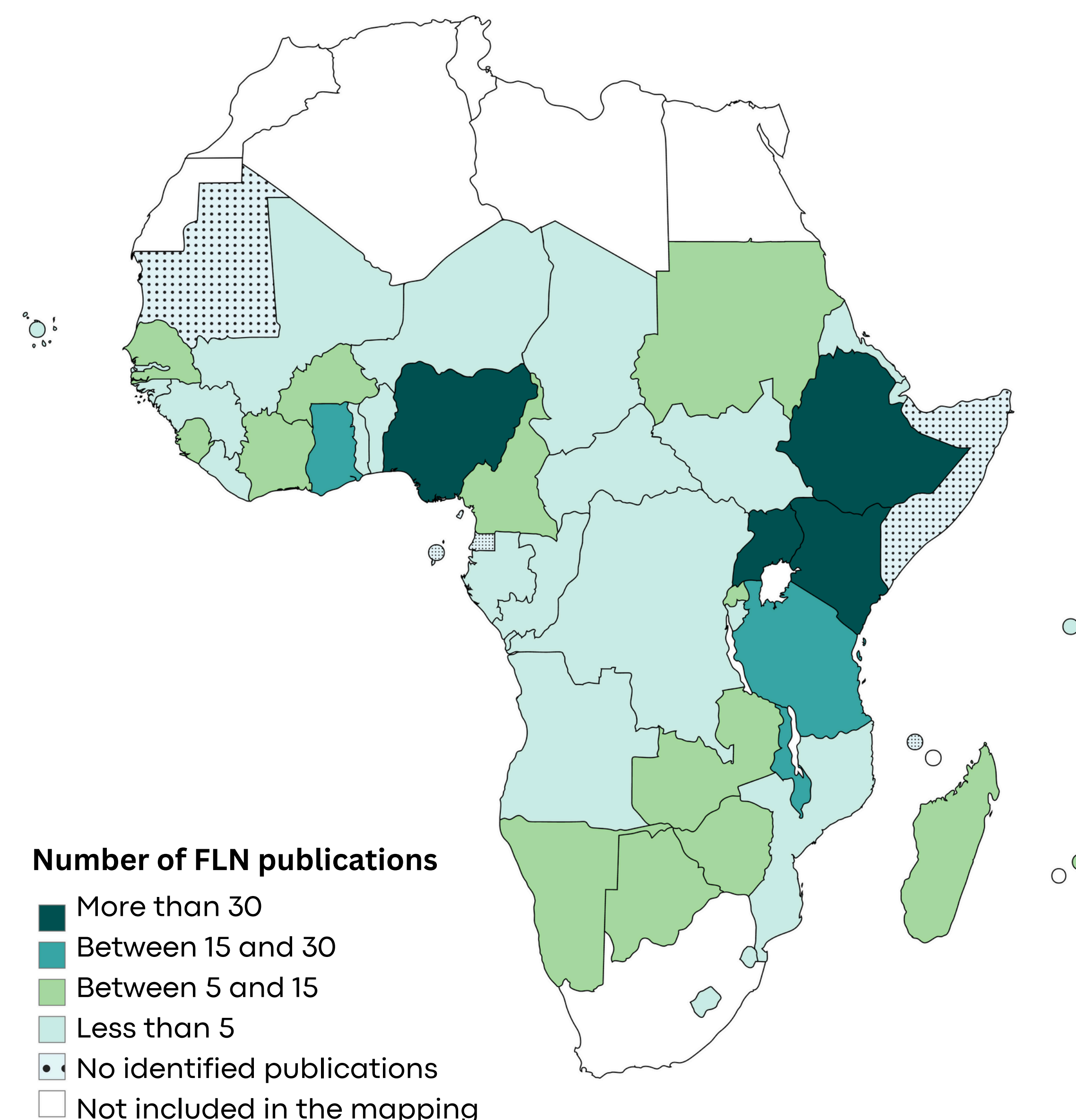
Socio-emotional skills and disabilities are invisible in FLN research

- Literacy, often combined with reading skills, is the largest focus. Numeracy and mathematics education follow. **Studies on socio-emotional skills, writing, and speaking skills are limited.**
- Majority of the studies are quantitative.
- **Many studies do not focus on inequality indicators:** Disabilities are rarely mentioned.

Limited funding opportunities within SSA

- Half of FLN studies is undertaken **without funding**.
- Predominant funding support from USA and UK.
- Limited African governmental support, with notable efforts from Kenya, Namibia, Nigeria, Seychelles, Sudan, and Uganda.

Repartition of FLN Publications



Number of FLN publications

- More than 30
- Between 15 and 30
- Between 5 and 15
- Less than 5
- No identified publications
- Not included in the mapping

What about FLN Francophone Publications?

Francophone publications are likely to be overlooked

- Conducting systematic literature searches in French is **more complex due to limited functionalities of Francophone databases**.
- Lower knowledge production in French with only 34 identified publications. **Absence of FLN publications in French in international databases.**
- **Low visibility and impact of Francophone journals:** 11 out of 16 of them are not indexed in SJR.

Is the concept of FLN a focus in Francophone research?

- 23 out of 34 identified publications are indirectly relevant to FLN. While studies focus on language of instruction, literacy and teaching methods, they do not always directly connect to learning outcomes.

Challenges and insights in Francophone research

- **Limited collaboration**, the majority of publications are authored by a sole researcher (65%), and **underrepresentation of female researchers** (18%).
- **Dominance of qualitative studies** in the Francophone dataset.
- Out of 64 publications studying Francophone countries, **half are published in English** (31), highlighting the dilemma faced by Francophone researchers in academia: “publish in English or perish”, while also indicating potential bilingual research engagement.

What does this mapping tell us?

- Consistent rise in FLN research outputs but limited published evidence accessible in international and Francophone databases.
- FLN literature is identified dominantly in English.
- Scarce intersectional focus on equitable learning outcomes, with disabilities being a neglected theme.
- Research collaboration with partners from the global North is more common than collaboration across SSA countries.
- Unequal access to funding opportunities and notable gender disparities in research initiatives.

Recommendations

Improve Visibility of African Research

Develop inclusive practices in academic publishing, focusing on language, indexing, and enhancing Francophone database functionalities.

Enhance Intersectional Focus

Increase attention to intersectionality in FLN research to address the need of marginalised groups, including those with disabilities.

Promote Collaboration Across SSA Countries

Establish/strengthen **FLN networks'** activities and influence in SSA.

Diversify Funding Sources

Broaden funding sources to include **philanthropic organisations and SSA government institutions**.

Promote Gender Equity in Educational Research

Implement **country-specific mentorship and training components** to build capacity and enhance female researchers' visibility in the academic community.

Visit the African Education Research Database to find the complete list of identified FLN publications and more!



<https://essa-africa.org/AERD>

For targeted FLN search, use the thematic area / keyword “Foundational Learning”



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(1) World Bank classification of sub-Saharan Africa with the addition of Djibouti and exception of South Africa. The latter is not affected by the same challenges as others in the region in terms of scope and visibility of publications
(2) Scimago Journal and Country Rank