



Language of Instruction in Foundational Literacy & Numeracy Programs in sub-Saharan Africa: The Basics

In Africa and across the global South, foundational literacy and numeracy programming (FLN) is being implemented in complex language environments. In these environments, language of instruction (LOI) choices have a significant impact on learning outcomes. This overview is intended to provide an orientation on core concepts and issues related to LOI. A pull-out poster on key terms for LOI is also included, describing various terms and features related to writing systems as well as key linguistic terms. The companion how-to guide, [Practical Language Choices for Improving Foundational Literacy & Numeracy in sub-Saharan Africa](#), provides a practical roadmap for navigating language of instruction issues.

Language and learning in the formal classroom context

One of the signature features of formal education is the centrality of language for teaching and learning; the content of the formal curriculum is transmitted to students primarily through spoken and written language. This distinguishes formal education from other forms of learning, in which knowledge may be gained through observation and imitation of actions or behaviors, not just through spoken language (the terms “spoken”, “speaker” and “speech” in this guide refer equally to deaf and non-deaf communicative forms).

Language use in the formal classroom involves the four language skills of speaking, listening, reading and writing. These language skills are necessary for successful learning of any classroom subject, and the classroom teacher has a key role in building them in the learner across subjects. Table 1 presents the four language skills and the ways in which the teacher typically supports their development.

TABLE 1 . Features of language use in the formal classroom

The four language skills as described here are understood to include the skills related to using sign language and Braille, where appropriate to the student

Skill	Activity	The teacher's role in developing the skill
Speaking 	The speaker uses spoken or signed language to express knowledge, ideas, or emotions	Model correct pronunciation, grammar Explain difficult concepts Model reasoning and logical argument Model creativity in communicative expression Describe concepts found in the written textbook <i>Students are encouraged to do the same in class</i>
Listening 	The listener gains information from others by receiving and interpreting their messaging in spoken or signed language	Check that verbal information has been correctly understood Help students learn and practice strategies for active listening <i>Students are encouraged to listen and respond to the teacher, and to each other</i>



Skill	Activity	The teacher's role in developing the skill
Reading 	The reader uses their knowledge of the written code of a given language (whether print or Braille) to gain information from a written text	Provide explicit reading instruction, in a language that the student understands Model fluent reading Model reading comprehension Support correct and consistent use of textbooks Read aloud to students: both textbooks and other types of written text <i>Students practice reading aloud and silently</i> <i>Students practice demonstrating comprehension of text read</i>
Writing 	The writer expresses thoughts and information through the written code of a language (whether print or Braille)	Model fluid, legible, accurate writing Model the use of writing both for conveying information and as a form of self-expression Model knowledge of the written form of the language of instruction <i>Students practice writing, both dictation and independent writing</i> <i>Students read aloud what they have written</i>

This extensive reliance on language skills for learning in every subject of the formal curriculum is based on the assumption that the student understands the language in which these activities take place. This is why, no matter what the subject is, being able to speak, understand, read and write the LOI is crucial to effective learning. Teaching any subject in a language that the student has not mastered may result in the memorization of subject content, but it will not promote real learning of what is being taught.

USEFUL TERMS FOR TALKING ABOUT LANGUAGE OF INSTRUCTION

A variety of terms are used to distinguish the languages used in the classroom. These terms may reflect either the learner's perspective or the wider language in education policy choices.



The first language that a child learns to speak is called the **CHILD'S MOTHER TONGUE, L1, HOME LANGUAGE, or HERITAGE LANGUAGE**. This language may be local and indigenous to the community, it may be a language spoken in the immediate catchment area or region, or it may simply be the language that the young child's primary caregiver speaks.



Any language that a child learns outside of his or her home is called a **SECOND (or third, etc.) LANGUAGE, L2, FOREIGN LANGUAGE, or ADDITIONAL LANGUAGE**. These languages are often regional, national or international languages that function as languages of wider communication.



A language that is spoken in a limited geographical setting is called a **LANGUAGE OF WIDER COMMUNICATION** or a **LINGUA FRANCA**. This may be the L1 of some of the speakers, but it will not be the L1 of everyone in the region.



The language used to teach lessons in the classroom is referred to as the **LANGUAGE OF INSTRUCTION (LOI) or MEDIUM OF INSTRUCTION**. This may be the child's L1, or L2 (L3, etc.) The choice of LOI in the classroom is based primarily on national language policy.



National language policy generally includes the designation of **OFFICIAL** or **NATIONAL LANGUAGES**, as well as the roles they are expected to fill. Official languages may be languages that are indigenous to the country, and/or internationally-spoken languages.

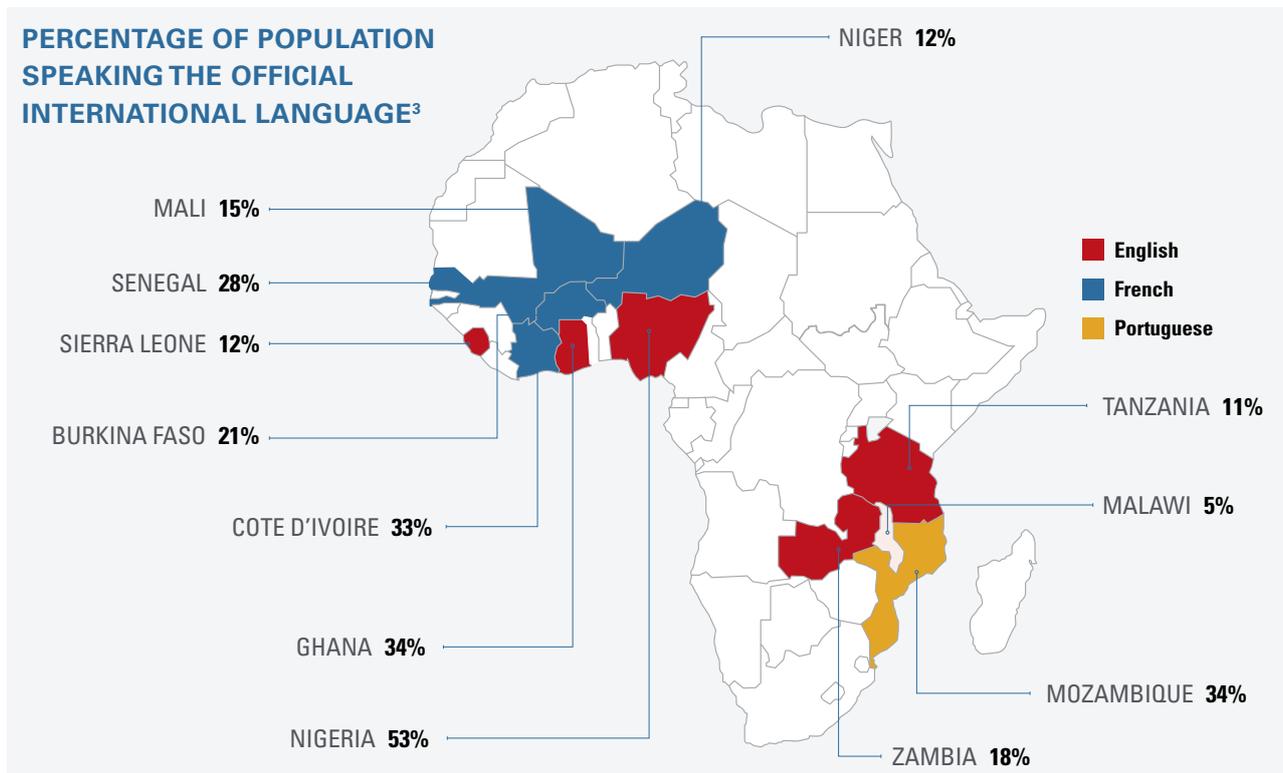
The term "mother tongue" is very commonly used in sub-Saharan Africa, and is understood to be unrelated to the child's actual family environment.



Why Language of Instruction Choices Matter

In the multilingual, multicultural context of international education today, issues surrounding LOI are highly relevant.¹ These issues are especially relevant in low- and middle-income countries of Africa, where international languages such as English, French, Portuguese, and Arabic carry a great deal of prestige for historical, cultural, political and/or economic reasons. As a result of their elevated status, these languages tend to dominate formal education systems regardless of the ability of students or teachers to speak them.² This is a very real problem, because fluency in international languages is not common among primary-grade children in Africa, especially in rural and low-resource environments. The table below shows the percentage of the overall population that speaks the official international language in a sample of African countries. The actual language fluencies of primary school- aged children are certain to be even lower.

FIGURE 1. International language fluencies in selected sub-Saharan African nations



These figures make a strong case for using a local language as the LOI. Local language-medium instruction in primary school classrooms is beneficial for a variety of reasons, including enhanced inclusiveness, lower attrition rates, and greater parental involvement in children's education. Pedagogically, it ensures that young students genuinely understand what they are being taught, thereby maximizing their learning outcomes.⁴ In the context of learning loss due to COVID-19 school closures,⁵ it becomes even more important to give learners every possible chance to succeed.

The Debate around Language of Instruction Choices

Despite such evidence regarding the value of local-language learning, for highly multilingual nations the debate around LOI choices is shaped not only by classroom pedagogy, but also by the national political environment, national and global education expectations, parental aspirations and economic concerns, and beliefs that have been absorbed over time about the adequacy of different languages for formal learning.

As a result, the context in which FLN programs in sub-Saharan Africa operate is one where national and international languages of instruction tend to be prevalent, despite research evidence suggesting that a greater focus on local languages of instruction could lead to stronger learning outcomes. FLN program responses to the LOI context



range widely, depending on how decision-makers respond to the research evidence, along with other factors, when making decisions about language of instruction.

The decision about which LOI to use does rest on some very real costs and benefits of the various language choices, as shown in Table 2.

TABLE 2. Benefits of different language of instruction choices⁶

Local language	National or international language
Enhanced learning	Prestige
Decreased dropout	Matches aspirations of the student or their family
Greater parental involvement and support	Broader availability of teaching and learning materials
Inclusiveness	Preparation for LOI of secondary and tertiary education

Aside from these actual costs and benefits, Table 4 lists a number of common misperceptions that exist about LOI as well:

TABLE 3. Misperceptions and realities of LOI in Africa

Misperception	Reality
✗ "You can't get a job knowing only the L1."	✓ Both the L1 and the L2 can be useful in finding income-earning opportunities. In Africa, more L1-based opportunities are actually available to citizens than opportunities in international languages. ⁷
✗ "Using the L1 in school will keep my child from learning the L2 well."	✓ Using the L1 in learning can facilitate learning of the L2. ⁸
✗ "You can't teach 'outside' content in local languages."	✓ Any language can be used to teach any content, provided that the appropriate vocabulary has been developed. ⁹
✗ "Permitting the use of local languages in school damages national unity."	✓ Civil conflict and disunity stem not from language diversity, but from social factors such as unequal treatment, injustice and political disagreement. ¹⁰

What the Research Says about Language of Instruction Choices

In addition to these real and perceived issues that affect policy and practice around language of instruction, the research indicates that some language policy choices are more effective at producing successful learners by the end of the primary grades. A recent study of nine bilingual education programs carried out in Africa¹¹ found that these programs are most successful at producing learners who can successfully transition to secondary school when they have the following features:

- Use of the L1 as the LOI throughout the primary grades
- Teaching and learning materials developed specifically in and for the L1
- Teachers who are bilingual/multilingual in the languages of the classroom (including their written forms)
- A strong L2 language-learning curriculum throughout the primary grades
- Targeted L2 vocabulary-building in academic subjects

Common Language of Instruction Models in Primary Schools in Africa

Given all of the above factors and influences, education program designers in Africa tend to choose from among a small set of LOI models. The table below lists these models, in descending frequency of their occurrence.

**TABLE 4. Most common models of LOI in Africa**

LOI model	Practice	Comments	Example
L2 submersion ¹²	An L2 is the LOI throughout primary school; no pedagogical support exists for students' lack of L2 fluency	L2 is typically a national or international language	Cameroon: Two international official languages (English and French) are the LOI; the 270+ local Cameroonian languages are not supported in government classrooms
L1-L2 early-exit transition	L1 is the LOI through grades 1, 2 or 3; L2 is the LOI thereafter	A common policy choice, but implementation is usually limited to relatively few L1s; not commonly implemented	Ghana: 11 (of up to 73) Ghanaian languages are approved as LOI through P3; English as LOI thereafter ¹³
L1-L2 late-exit transition	L1 is the LOI into the upper primary grades; L2 is the LOI thereafter	Not a common policy choice	Ethiopia: 30+ (of 87) Ethiopian languages developed and used as LOI through grades 4, 6 or 8; English as LOI thereafter

Working effectively within the context

It is clear that the contexts in which LOI choices play out have important social, linguistic, political, and pedagogical features. Here are some key considerations to take into account in developing an effective FLN program in these contexts. These factors, and ways they may be managed, are described in more detail in the companion how-to guide, *Practical Language Choices for Improving Foundational Literacy & Numeracy in sub-Saharan Africa*.

LANGUAGE POLICY

An effective FLN program response to national context includes understanding the influence and limitations of the national language policy.¹⁴ The strength, authority, and permanence of this policy can vary, depending on the government body that oversees it. Local implementation of the national language policy may either follow the policy completely, or adapt it to serve local interests and realities.

The varied interpretation and implementation of language policy, and even significant revision of policy by new leadership in government, makes it worth investing in policy advocacy in FLN programs. The fluidity of these language policies can also make space for experimental or pilot programs that use local LOI in different ways than what is dictated by national policy.

L1 FOR LITERACY INSTRUCTION ONLY VS. L1 ACROSS THE CURRICULUM

One important feature of L1-medium language policy is that a policy commitment to “using L1 through grade X” often does not play out as L1-medium instruction in all subjects. Instead, certain subjects are typically taught in the L1 (usually L1 language arts or literacy), while other subjects (such as mathematics and science) are taught in the L2. This strategy is understandable, given the substantial effort and resources required to move an entire curriculum from an international language medium to individual local languages. However, it has to be noted that restricting L1 use to the areas of language and literacy generally results in considerably weaker learning outcomes than when the L1 is used across the curriculum, since teaching any subject in a language the child does not understand does little to facilitate the child’s learning.

Since large-scale FLN programs are generally designed to align with the national policy commitments of the host governments, they tend to follow the strategy of L1-medium language use for language and literacy subjects. Indeed, the current rationale for L1-medium FLN programming is based on the accepted position that reading and writing are foundational to learning of all kinds. Large international donors such as USAID,¹⁵ the Global Partnership for Education,¹⁶ and the World Bank¹⁷ have taken this position of particular support for L1-medium literacy learning, especially in the early primary grades. Less attention has been given to programming that utilizes the L1 in other subjects.



PILOT PROGRAMS VS. SCALED-UP PROGRAMS

The local nature of L1-medium programming readily lends itself to a tailored, experimental approach to L1-medium learning. For decades, nongovernmental organizations have been carrying out local-level L1-medium learning programs in African schools.¹⁸ Much knowledge has been gained from these efforts, particularly concerning the issue of language acquisition; however, these programs' impact has usually been limited to the local context and they have had little influence on national-level practice.

Since 2010, increasing numbers of large-scale L1 early-grade literacy programs have been rolled out across Africa.¹⁹ However, the infrastructural and financial requirements of such large-scale programming, as well as the expectations of eventual program control by government stakeholders, bring a complexity and cost well beyond that of locally implemented programs. Moreover, in countries where multiple L1s are used in such programming, policy makers must consider the linguistic, political, and social implications of their language choices.

THE LANGUAGE CHOICES IN YOUR CONTEXT

As noted above, national LOI policies and practices range from explicit policy commitments to the exclusive use of international languages, to highly permissive approaches that allow many languages to be used in the classroom. In permissive policy environments, good multilingual education practices can be embedded in the school, with the development and effective use of teaching and learning materials in both local and official languages throughout the primary grades.

However, where only international LOI are permitted, abiding by such policies may mean having to support the use of languages that the majority of students do not understand. In these cases, the program should prioritize teaching practices that build students' oral and written fluency in the L2 so as to support its use as a medium for learning.²⁰ In this way, it is possible to ensure that L2 language programs secure better learning outcomes for children.

PROGRAM SUSTAINABILITY

One of the greatest benefits that large-scale FLN interventions provide is clear evidence that learning can be more inclusive, more effective, and more beneficial to the country than it is under current practices. Where local languages are included in the program, evidence on learning gains and student engagement is also a powerful argument for this strategy. However, these positive program outcomes depend on a significant investment of financial and human resources, and are often dependent on external funding support. This can put the long-term sustainability of these interventions into doubt. The LOI strategies of large-scale programs are also vulnerable to changes in national language policy or its interpretation, often with little warning.

This is why, where local LOI strategies are part of an FLN program, implementers should aim to strengthen the national and local educational infrastructures to support the use of multiple LOIs. They should prioritize delivering adequate numbers of teaching and learning materials in the target languages at as low a cost as possible, as well as ensuring ongoing teacher capacity-building for teaching in these languages. (For more specific ideas on teacher capacity-building and support, see the companion How-To Guide: *Practical Language Choices for Improving Foundational Literacy & Numeracy in sub-Saharan Africa*.)

Conclusion

The language of instruction component of FLN programs can be challenging, but it does not have to be overwhelming. The growing body of evidence on LOI outcomes over the past decade, including a great deal of evidence from programs carried out in Africa, provides valuable information for making good decisions about language of instruction. For more information on important program issues such as which type of multilingual education program is appropriate for your context, the potential challenges you should be prepared for, and other program design considerations, refer to the companion How-To Guide: *Practical Language Choices for Improving Foundational Literacy & Numeracy in sub-Saharan Africa*.



RESOURCES

An MLE advocacy resource from UNESCO: [Including The Excluded: Promoting Multilingual Education](#)

From USAID and RTI: [Planning for Language Use in Education: Best Practices and Practical Steps to Improve Learning Outcomes](#)

From the UNESCO Institute for Lifelong Learning and the Association for the Development of Education in Africa: [Why and How Africa Should Invest in African Languages and Multilingual Education](#)

SIL International on good answers to tough questions in MTB-MLE: [Good Answers to Tough Questions in Mother Tongue Based Multilingual Education | SIL International](#)

RTI's new how-to guide: [Practical Language Choices for Improving Foundational Literacy and Numeracy in Sub-Saharan Africa](#)

ENDNOTES

- 1 World Bank, Loud and Clear: *Effective Language of Instruction Policies for Learning* (Washington, DC: World Bank, 2021).
- 2 Joseph Zajda (ed), "Overview and Introduction," in *Second International Handbook on Globalisation, Education and Policy Research* (New York: Springer, 2015); Barbara Trudell, "Globalisation and Curriculum in African Classrooms: Is There Space for the Local?," in *Language and the Sustainable Development Goals*, edited by Philip Harding-Esch and Hywel Coleman (London: British Council, 2021).
- 3 All figures are from David Eberhard, Gary Simons, and Charles Fennig (eds), *Ethnologue: Languages of the World*, 23rd edition (Dallas: SIL International, 2020).
- 4 David Evans and Amina Mendez Acosta, "Education in Africa: What Are We Learning?," *Journal of African Economies* 30, no. 1 (2021).
- 5 Ricardo Sabates, Emma Carter, Jonathan M.B. Stern, "Using educational transitions to estimate learning loss due to COVID-19 school closures: The case of Complementary Basic Education in Ghana," *International Journal of Educational Development*, Volume 82, 2021, 102377, ISSN 0738-0593, <https://doi.org/10.1016/j.ijedudev.2021.102377>.
- 6 Lila Schroeder, Megan Mercado, and Barbara Trudell, "Research in Multilingual Learning in Africa: Assessing the Effectiveness of Multilingual Education Programming," in *Multilingual Learning in Sub-Saharan Africa: Critical Insights and Practical Applications*, edited by Elizabeth Erling, John Clegg, and J. Reilly (London: Routledge, 2021); Trudell, Piper and Ralaingita (2021); Barbara Trudell, "The mythic and the authentic value of English in the African classroom: A policy perspective." In *Kashif Raza, Christine Coombe & Dudley Reynolds (eds), Policy Development in TESOL and Multilingualism: Past, Present and the Way Forward.* (Springer, 2021). Carol Benson, "Girls, Educational Equity and Mother Tongue-Based Teaching." *Bangkok, Thailand (UNESCO, 2005)*
- 7 Thomas Ricento, "Political Economy and English as a 'Global' Language," in *Language Policy and Political Economy: English in a Global Context*, edited by Thomas Ricento (Oxford: Oxford University Press, 2015).
- 8 Richard Johnstone, "Addressing 'the Age Factor': Some Implications for Languages Policy." Strasbourg: Council of Europe (2002).; Diana C. Castro, Mariela M. Páez, David K. Dickinson, and Ellen Frede, "Promoting language and literacy in young dual language learners: Research, practice, and policy." *Child Development Perspectives* 5.1, 15-21 (2011).
- 9 Kwesi Kwaa Prah, "African Languages for the Mass Education of Africans." *Cape Town: CASAS* (1995).
- 10 A. Bamgbose, "Language and Nation: The Language Question in Sub-Saharan Africa." (*Edinburgh: University of Edinburgh Press, 1992*).
- 11 Lila Schroeder, Megan Mercado, and Barbara Trudell, "Research in Multilingual Learning in Africa: Assessing the Effectiveness of Multilingual Education Programming," in *Multilingual Learning in Sub-Saharan Africa: Critical Insights and Practical Applications*, edited by Elizabeth Erling, John Clegg, and J. Reilly (London: Routledge, 2021).
- 12 Carol Benson, "The Importance of Mother Tongue-Based Schooling for Educational Quality." *Commissioned Study for EFA Global Monitoring Report, 2005* (Stockholm University, 2004).
- 13 Gladys Nyarko Ansah. "Re-examining the fluctuations in language-in-education policies in post-independence Ghana". *Multilingual Education* 4:12, 1-15 (2014).
- 14 African Conference on the Integration of African Languages and Cultures into Education, "Policy Guide on the Integration of African Languages and Cultures into Education Systems." Amended and adopted by the Ministers of Education present at the African Conference on the Integration of African Languages and Cultures into Education. Ouagadougou, Burkina Faso, 20-22 (January, 2010).
- 15 USAID, *USAID Education Policy* (Washington, DC: 2018).
- 16 Global Partnership for Education, "Leaving No One Behind. A Knowledge and Innovation Exchange (KIX) Discussion Paper." *Washington, DC: Global Partnership for Education* (2019).
- 17 World Bank, "Through a Glass Clearly: Increasing Engagement with language of Instruction for Equitable Learning." *A World Bank Group Position Paper, 2021*.
- 18 See for example the PROPELCA project of Cameroon (Tadadjou 1990), the Ngbaka-language program of northwestern DRC (Robinson and Gfeller 1997), the Obolo bilingual education program in southern Nigeria (Aaron 2018), and the pilot MLE programs carried out by BTL Kenya in several Kenyan languages (for example, Jones and Barkhuizen 2011, Graham 2010).
- 19 For example, see web citations for USAID-sponsored early-grade reading projects that focused on L1-medium learning such as the *Literacy, Language and Learning (L3)* project in Rwanda, the *USAID Partnership for Education: Learning in Ghana, the Northern Education Initiative Plus in Nigeria, the Uganda School Health and Reading Program (SHRP)*, and the *Lecture Pour Tous* (Reading for All) project in Senegal. All of these projects have been carried out since 2010.
- 20 The experience of successful English language learners (ELL) programming in the United States can be of help here. Effective principles include teaching the L2 vocabulary across the curriculum, emphasizing productive L2 use in the classroom, using multiple modalities for learning the L2, and being culturally responsive to students. Emily Kaplan, "6 Essential Strategies for Teaching English Language Learners," *Edutopia* (April 12, 2019), <https://www.edutopia.org/article/6-essential-strategies-teaching-english-language-learners>.
- 21 [The 100 Most Common Chinese Characters | Chinese Language Institute \(studycli.org\)](#).
- 22 Written according to the International Phonetic Alphabet.



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Writing systems and reading: Some definitions

WRITING SYSTEMS/ORTHOGRAPHIES

Term	What it means	Illustration
Writing system/orthography	The set of conventions for writing a language that must be learned in order to read in that language. Example: Any language with a history of a written form.	English spelling rule: the letter “i” represents the vowel sounds in both “bite” and “bit”
Alphabetic or syllabic writing systems	Where the units that make up written words are composed of letters or letter combinations; learning to read involves learning a limited number of letters or syllables. Example: English, Ethiopic, Hebrew	English: “c” + “a” + “t” = “cat”
Ideographic/logographic /morphemic writing systems	Where the units or characters that make up written words represent meaning rather than sound; learning to read involves learning the meaning of thousands of characters. Example: Chinese	会 Chinese character “hui” (English meanings: can, able, meet, meeting, union, society, party) ²¹
Morphophonemic writing system	Where the units that make up written words can be based on sounds and/or units of meaning	English: “In” [not] + “possible” = “impossible”

FEATURES OF WRITING SYSTEMS/ORTHOGRAPHIES

Feature		
Transparent/shallow	Where each letter or letter combination has only one sound associated with it, allowing the learner to “sound out” words. Examples: Spanish, Japanese syllabary, Swahili	Swahili: “simba” (lion) is written phonemically as /s/+i/+mb/+a/
Opaque/deep	Where a letter or letter combination can have more than one sound associated with it, requiring other strategies for reading besides “sounding out” words. Examples: English, French, Danish	English: the sound of the letter combination “ough” varies: “cough”, “tough”, “dough”, “through”
Nasalization, length, tone, advanced tongue root (ATR)	Phonemic features that vary from language to language, and are not always represented the same in different orthographies (and sometimes are not represented at all)	The long vowel /o:/ may be marked as “oo”, “ö” or be unmarked. In Bantu languages of Kenya, the vowel /u/ is sometimes written as “i” and sometimes as “i”
Underrepresentation	When too many linguistic features are unmarked in the orthography, hindering even fluent speakers of the language from reading their language easily.	Some vowel features of Western Pokot (Kenya) are unmarked: e.g. the written word egh means either “hand” or “bull”.

LINGUISTIC TERMS USED FOR LETTERS AND SOUNDS

Term	Meaning	Example (where relevant)
Phonology	The organization of the sounds in a given language	
Phonetics	The production of sounds	Swahili prenasalized consonants
Phone	Individual sound	[k], [nd], [ɔ], [m], [β], [tʃ] ²²
Phoneme	A sound that distinguishes one word from another in a given language	English vowels /a/, /ə/, /ʌ/, /i/, /ε/, /o/, /a/ “pop”, “pup”, “pip”, “peep”, “pep”, “pope”, “pipe”
Phonics	A reading instructional method for alphabetic writing systems, which teaches the correlation between specific sounds and symbols (graphemes or syllables)	English exercise: cat mat sat bat
Morphology	The structure of words in a given language	How noun plurals, verb tenses, etc. are expressed
Morpheme	Smallest meaningful unit in a language	Morphemes in the English word “internationalization” = Inter-nation-al-iz(e)-tion
Grapheme	Minimal unit of writing	Alphabetic letters, syllabic characters, logographic characters