

Decolonizing Science: Indigenous Language and Digital Culture in Africa

Introduction

The use of European languages as official media of communication, education, governance, and trade is one of the unending legacies of imperialism in Africa.¹ English, French, Portuguese, and Spanish have remained the official languages of over fifty countries in Africa, even after decades for former disengagement from colonial rule.² In Nigeria, for example, English remains the dominant language of officialdom. Because language is not just a means of communication, but also the repository of people's identity and memory, the continued use of English as the official language in Nigeria has significant implications for every aspect of the country's history. So, what colonized communities witnessed during colonialization was a system of alienation from their root, what Ngugi wa Thiong'o calls the 'base.'³ Babs Fafunwa, in his book, *History of Education in Nigeria*, highlights three major systems of education in Nigeria: African education, Muslim education, and Western-oriented-cum-Christian education.⁴ As colonialism crystallized in the early 20th century, Western-oriented-cum-Christian education gradually expanded to train the manpower needed by the British government to organize and govern Nigeria. This need for manpower underlined colonial government policy on language as a medium of instruction in schools, which alienated indigenous languages such as Yoruba, Hausa, and Igbo, among others.⁵

This article discusses Science in Yoruba (SiY), a digital platform launched in 2017 by Dr. Taofeeq Adebayo to disseminate fundamental and sophisticated scientific knowledge to the general population in Yoruba. It emphasizes the perspectives and experiences of the Yoruba, the primary audience, as individuals capable of understanding and absorbing the complexities of Western science. In addition to simplifying this knowledge for conventional students in primary, secondary, and tertiary institutions, it also democratizes Western science for many unlettered Yoruba

¹Babaci-Wilhite, Zehlia, "Local Languages of Instruction as a Right in Education for Sustainable Development in Africa" *Sustainability* 5, no. 5(2013): 1994-2017, <https://doi.org/10.3390/su5051994>.

²Igboanusi, Herbert, and Lothar Peter, "The Language-in-Education Politics in Nigeria." *International Journal of Bilingual Education and Bilingualism* 19, no. 5(2015): 563-78, <https://doi:10.1080/13670050.2015.1031633>.

³Ngugi wa Thiong'o, *Decolonizing the Mind: The Politics of Language in African Literature* (James Curry Ltd., 1995). 16.

⁴Fafunwa, A. Babs. *History of Education in Nigeria* (Allen & Unwin, 1974).

⁵Bamgbose, Ayo. "Education in Indigenous Languages: The West African Model of Language Education." *The Journal of Negro Education* 52, no. 1 (1983): 57. <https://doi.org/10.2307/2294748>.

speakers. I argue that SiY highlights the enduring efforts to contest linguistic imperialism and language endangerment in Africa. Kofi Agyekum defines linguistic imperialism as the ability of indigenous people to gradually become conscious of the shunning of their indigenous languages and adopt foreign languages because of the benefits they expect to derive from them.⁶ With approximately fifty million Yoruba speakers globally, SiY builds on a strategic approach to recentring Yoruba as an important global language.⁷ In addition to leveraging social media spaces, the purpose and significance of SiY lie in its capacity to teach and rely on its audience to expand Yoruba scientific vocabularies, especially in the era of information technology. Drawing on a digital ethnographic survey, an oral interview with the founder, and existing literature in history and linguistics, I highlight how SiY has become a source of knowledge for conventional students and lay Yoruba speakers worldwide.⁸

Decolonizing Language: A Literature Review

Scholars' approaches to the question of language decolonization differed greatly. According to Emilie Tenbroek, in decolonizing knowledge, historians must confront two histories and address the continuing effect of imperialism, even now.⁹ One is the imperial institutions that established the ideological foundation that protected empire and the superior positions that these Western institutions still have today. Second are the histories that allow decolonial researchers to critically evaluate whatever materials emerge from these institutions, including student research, as biased. The decolonization endeavor must include decolonizing the language we employ to prevent perpetuating damaging beliefs. Replacing indigenous languages with English was not only

⁶Kofi Agyekum "Linguistic Imperialism and Language Decolonization in Africa through Documentation and Preservation" in *African linguistics on the prairie: Selected papers from the 45th Annual Conference on African Linguistics*, ed. Jason Kandybowicz, Travis Major, Harold Torrence & Philip T. Duncan (Language Science Press, n.d.), 87-88.

⁷ Most Yoruba speakers reside in West Africa, particularly in Nigeria, Benin, Togo, and Sierra Leone. There are also smaller Yoruba communities in Brazil, Cuba, Venezuela, Trinidad and Tobago, Haiti, and the United States.

⁸As a digital ethnographer, I spent at least one hour listening to various content on the SiY Facebook page and examining audience reactions and interactions, which included responses and rejoinders. In addition to appreciating the promoter of SiY, many audience members also contribute to expanding Yoruba scientific vocabulary while enhancing their knowledge.

⁹Tenbroek, Emilie "Decolonizing Language in History: Humanize, Decentre, Specify, Expand, Listen." (n.d.). Accessed: July 9, 2025. <https://www.durham.ac.uk/media/durham-university/departments-/history/Decolonising-Language-in-History.pdf#:~:text=British%20universities%20still,address%20the%20continuing,%20effects>

degrading, but it also forced people to disconnect from the identity and culture that language embodies.

Emmanuel Ayandele's classic, *The Educated Elites in the Nigerian Society*, is instructive on the role the educated elites played in the evolution, spread, and consolidation of Western education in Nigeria.¹⁰ Described as “delude Hybrid and collaborators,” Ayandele argues that the first generation of educated elites—the free slaves, liberated Africans, and the Brazilian and Cuban returnees—helped the British imperialist to establish colonialism in Nigeria. The second generation, he argues, though born and bred in Nigeria, were self-styled spokespersons, while the third category, the nationalists, never regretted the establishment of British rule in Nigeria. On the contrary, they professed loyalty to the British Commonwealth. Ayandele contends that Nigeria's post-colonial crises were largely deepened by the educated elites during the transitioning years. The nationalists that succeeded the colonial powers have been accused of continuing with the colonial policies, including in the area of education. Despite the positive outcomes that have resulted from the experimentation of indigenous languages as a means of educational instruction, studies have shown that the government lacks sustained interest in such projects to attain a meaningful ending.

Language is linked to power, value, class, and access. Language determines who gets to talk, where they speak, and who listens to them. By enforcing colonial languages, which many African and other colonized territories continue to do, they not only reinforce the superiority of foreign languages but also prevent a large number of people from obtaining an education, finding work, and contributing to national development discussions. Language is essential to the historian's art. Historians use language to access and appraise histories, both textual and oral, to engage with the perspectives of other historians through written works, and to disseminate new findings. Historians working in colonial archives have read colonial materials against the grain.¹¹ By reading against the grain, slavery historians like Jennifer Morgan have made significant contributions to the body of works that give voice to enslaved Africans - men, women, and children.¹²

¹⁰Ayandele, E.A. *The Educated Elites in the Nigerian Society* (Ibadan University Press, 1974).

¹¹Dávila-Freire, Mela. “Reading the Archive against the Grain: Power Relations, Affective Affinities and Subjectivity in the Documenta Archive.” *Art Libraries Journal* 45, no. 3 (2020): 94–99. <https://doi.org/10.1017/alj.2020.14>.

¹²Morgan, Jennifer L. *Laboring Women: Reproduction and Gender in New World Slavery* (University of Pennsylvania Press, 2004).

According to Michel-Rolph Trouillot, archives are full of silences and erasures. Trouillot's famous book, *Silencing the Past: Power and the Production of History*, identified four ways in which silence enters historical production: the moment of fact creation (the creation of sources), the moment of fact assembly (the creation of archives), the moment of fact retrieval (the creation of narratives), and the moment of retrospective significance (the final creation of history).¹³ When colonial languages are used to express and recount history, there is a greater likelihood of bias. To address the issue of language imperialism in Africa, Ngugi wa Thiong'o proposes "securing the base" in his book *Decolonizing the Mind: The Politics of Language in African Literature*.¹⁴ Thiong'o, a literary critic, advocates for the use of African languages such as Yoruba, Hausa, Igbo, Kiswahili, Gikuyu, Luo, and Shona in literary texts. As Thiong'o points out, language reflects ideas and assumptions both publicly and privately. Imperial languages like English, French, Portuguese, and Spanish, which are still official languages in their former colonies, not only sustain neocolonial hegemonies, but also alienate people from their identity and culture. For example, Thiong'o regrets how language imperialism denied local literary experts such as D.O. Fagunwa. It also preserves a sense of superiority, whereas significant African languages such as Yoruba, Igbo, Hausa, Wolof, Kiswahili, Gikuyu, Luo, and Shona, among others, remain suppressed even after colonialism.¹⁵

Much research on language in Africa have found that language regulations and linguistic practices are often unusual. Unlike scholars in sociocultural disciplines such as sociology, philosophy, history, and literary studies, linguistics scholars have approached the issue of language in Africa from a policy standpoint. They have been concerned about the effects of Mother Tongue Medium (MTM), Foreign Medium (FM), or both on the outcome of knowledge formation.¹⁶ They have not necessarily defined this approach as a decolonial framework that disentangles conquered cultures like Nigeria from the language imperialism imposed by European powers. Instead, they have worked to promote indigenous languages due to their widespread impact on society. According to Ayo Bamgbose, the earliest Christian missionaries recognized the importance of local languages

¹³Michel-Rolph Trouillot, *Silencing the Past: Power and the Production of History* (Beacon Press, 1995).

¹⁴Ngugi wa Thiong'o, *Decolonizing the Mind: The Politics of Language in African Literature* (James Curry Ltd., 1995).

¹⁵Ngugi wa Thiong'o, *Decolonizing the Mind*, 3.

¹⁶Mother-Tongue Medium (MTM) is an educational system that promotes the use of indigenous languages for communication. Foreign Medium (FM) replaces the indigenous language with a foreign language for communication, including in educational settings.

in advancing their missions.¹⁷ As European countries became involved in missionary efforts and subsequently established colonialism, education policy switched from Mother Tongue Medium (MTM) to Foreign Medium (FM). As colonial language became the major mode of communication and education, MTM, despite its clear positive influence, was marginalized, and the process persisted in postcolonial Africa. There have been initiatives to promote MTM in postcolonial Africa. As Bamgbose points out, three things were responsible for this endeavor. First, parents felt dissatisfied because FM produced neither literates nor illiterates. Second, increased primary education enrollment necessitated more people to give MTM at the lowest level of education. Third, the quest for authentic cultural and creative education contributed to the push for MTM education.¹⁸ The politics of language go beyond the international arena. At the national level, attempts to promote bilingual education in Nigeria have been largely unsuccessful.

In analyzing the issues of bilingual education among minority communities in Southern and Northern Nigeria, Igboanusi and Peter claim that many parents prefer English over indigenous language because it is more marketable. According to the findings of Bourdieu, Shoba, Chimbutane, and Bunyi, English is thought to be more valuable in the linguistic marketplace. Similarly, it is regarded as a means of achieving socioeconomic growth at the national, regional, and international levels.¹⁹ The diversity of Nigerian languages has also been used to promote foreign languages. For example, some individuals believe that speaking English allows their children to interact more easily with people of different ethnicities. However, Igboanusi and Peter argue that linguistic prejudice stems from Nigeria's political setup, which permits people to use ethnicity for political gain.²⁰ Chinua Achebe believes that language hybridity should be encouraged because the colonial language has become a major feature in African lives.

The primary goal of decolonization is the realization of one's worth and the ability to generate independent information that is acceptable for what it is without bias. This has been the main critique leveled at Western systems of knowing for their superiority claims. In her work, *The Invention of Women: Making an African Sense of Western Gender Discourse*, Oyeronke Oyewumi uses what Nupur Chaudhuri refers to as deconstructionist vocabulary to present alternative gender

¹⁷Bamgbose, Ayo. "Education in Indigenous Languages," 57.

¹⁸Bamgbose, Ayo. "Education in Indigenous Languages," 59-60.

¹⁹Igboanusi & Peter, "The Language-in-Education Politics in Nigeria," 565.

²⁰Igboanusi & Peter, "The language-in-education politics in Nigeria," 3.

discourse.²¹ She claims that the Western gender idea is body-focused and discriminatory. Gender, on the other hand, is socially created in the Yoruba, particularly among Oyo-speaking people, and gender roles are muddled. She maintains that Yoruba society is hierarchical, but that it is centered on age rather than gender. In fact, both men and women can co-switch tasks, defying the Western paradigm that elevates men over women. In examining the value of indigenous languages' ways of knowing, Paul J. Meighan demonstrates how technology has helped to revitalize the indigenous language.²² Meighan contends that the development of contemporary technologies is a result of imperialism, which excludes certain parts of the world. As a result, many indigenous populations are recipients rather than initiators and partners. He pointed out that with the introduction of Web 2.0 and Web 3.0, indigenous people may now benefit as co-creators and collaborators. With increased access, Indigenous groups are now creating movies, films, music, and other content in their own languages solely for Indigenous consumption.²³ As I will argue later, Science in Yoruba fits into the discourse of decolonization, not just by communicating complex scientific subjects in the indigenous language, but also by utilizing digital space to achieve that purpose.

Science in Yoruba: A Historical Background

Dr. Taofeeq Adebayo launched Science in Yoruba in 2017 as an educational tool for communicating and advancing scientific information to audiences of varied backgrounds, primarily Yoruba speakers. As the originator points out, the idea has been in the works since high school. His contact with the works of legendary Yoruba novelist D.O. Fagunwa prompted him to investigate how pupils at various educational levels might gain access to scientific disciplines such as mathematics, biology, chemistry, and physics, among others, in indigenous languages, particularly Yoruba, his native tongue.²⁴ These thoughts were strengthened during his undergraduate studies at Obafemi Awolowo University in Ile-Ife, when he published an essay in

²¹Oyeronke Oyewumi, *The Invention of Women: Making an African Sense of Western Gender Discourse* (University of Minnesota Press, 1997); Chaudhuri, Nupur. "Review of The Invention of Women: Making an African Sense of Western Gender Discourse, and: For Women and the Nation: Funmilayo Ransome-Kuti of Nigeria, and: Dislocating Cultures: Third World Feminism and the Politics of Knowledge". *NWSA Journal* 13, no. 1 (2001): 172-176. <https://dx.doi.org/10.1353/nwsa.2001.0005>.

²²Meighan, Paul J. "Decolonizing the Digital Landscape: The Role of Technology in Indigenous Language Revitalization," *AlterNative*, Vol. 17, no. 3 (2021): 397–405.

²³Meighan, Paul J. "Decolonizing the Digital Landscape," 401.

²⁴Dr. Taofeeq Adebayo, "The History and the Purpose of Science in Yoruba," interview by Sikiru Yusuff, Zoom Meeting, November 14, 2024.

The Nation newspaper in 2012.²⁵ In this piece, he highlighted his hope and desire to spread and domesticate scientific knowledge in indigenous languages, notably Yoruba. Why can't we employ local languages in education or investigate local knowledge in our languages, he wondered. Adebayo discovered answers to his long-held questions during his doctoral program in linguistics in the United States. In his account, he discloses:

In my second year as a PhD student, I had the opportunity to apply for a specific fellowship. That fellowship is all about community involvement. Initially, I planned to do something in New Orleans, perhaps on African American culture. Then something occurred to me; I considered an idea I had been considering for some time. I presented my proposal to the program director, and it worked. That was how science in Yoruba began. It all began with the fellowship, which provided funding for me. I hired four graduate students from the University of Ibadan.²⁶

Between 2017 and 2019, Adebayo and his team successfully translated a basic scientific textbook into Yoruba while simultaneously conducting experimental teaching in three secondary schools in Ibadan, Oyo State, southwestern Nigeria. Initially, the project was conceived and planned as a monolingual experiment. However, certain circumstances that exceeded their capabilities were neutralized against this approach.²⁷ As a result, a novel strategy for translanguaging was employed. Taofeeq Adebayo writes in his article, *Translanguaging in Science Education: Towards a New Approach to Mother Tongue Education in Africa*, that government policy, language of assessment, parental aspirations, students' language practices, teachers' translanguaging practices, classroom settings, and the consequences of contextual factors all contributed to the adoption of a new model, translanguaging in science education.²⁸ Internal migration is a feature of Nigeria and its people. People migrate from one section of the country to another, adopting and instilling new cultures

²⁵Adebayo, interview.

²⁶Adebayo, interview.

²⁷Adebayo, T. "Translanguaging in Science Education: Towards a New Approach to Mother Tongue Education in Africa", *Language and Education*, (2024), <https://doi.org/10.1080/09500782.2024.2431593>

²⁸ Adebayo, "Translanguaging in Science Education," 2.

and languages. At the same time, each ethnic group maintains its language as a cultural identification. As a result, promoting monolingual education in traditional schools is prohibited. Although each state of the federation has the authority to promote and protect the native language in their respective state, non-indigenes shall not be forced to follow such restrictions. Nigeria's constitution mandates multilingual education.²⁹

Two key factors have helped to sustain the Science in Yoruba project beyond its early projections. First, shortly after the project began, the COVID-19 epidemic occurred. Second, during the pandemic-induced lockdown, the usage of social media platforms was critical to the distribution of scientific information in audiovisual content. The excellent response received following the teaching trial at the schools demonstrated the project's far-reaching impact. Although comparing students' assessments of first and second-term results revealed no significant improvement, the students' level of confidence, outspokenness, and exposure to how indigenous language can convey complex scientific terms and methods was adequate.³⁰ Since the fellowship funds had also been discontinued, pursuing this endeavor appeared impractical. Furthermore, when COVID-19 imposed national constraints on people's movements, developing new methods of distribution became critical. This resulted in the movement of Science in Yoruba to virtual media, with Facebook, TikTok, and Instagram leading the way.³¹

SiY's Facebook page was created in 2017 during the secondary school's project phase. It functioned as a conduit for the team's activities between the classrooms and the broader public. After the fellowship funding ended and the pandemic limited the coordinator's ability to continue the class medium project, he turned to social media to maintain its contributions. According to Adebayo, the first content video, which depicted the life cycle of a mosquito, was posted on his personal Facebook profile.³² Although this video did not receive the expected level of participation, it served as a watershed moment for future transformation. Taking advantage of the COVID-19 outbreak, Adebayo started creating content to explain how the disease is contracted and spreads, along with the testing procedures. He also informed the public about hygiene and ways to prevent the pandemic from spreading. Social media emerged as a hub for social bonding,

²⁹Igboanusi & Peter, "The Language-in-Education Politics in Nigeria," 565.

³⁰Taofeeq Adebayo, "Translanguaging in Science Education".

³¹Adebayo, interview.

³² Adebayo, interview.

religious gatherings, and business transactions during the lockdown. Paul J. Meighan investigated how digital technologies have helped to revitalize indigenous languages.³³ Web platforms and algorithms are increasingly bringing marginalized languages into the mainstream, allowing Yoruba, Hausa, Igbo, Swahili, and Shona people, among others, to search for terms in those languages. For Science in Yoruba, social media serves as a platform for rethinking how to use its widespread acceptability for information exchange. How social media affects the future trajectory of science in Yoruba will necessitate substantial research. I will go over this briefly in the part that follows.

Science in Yoruba: Towards a Decolonial Pedagogy

Rendering scientific subjects and knowledge in indigenous languages can help to increase understanding, confidence, and trust.³⁴ Attempts to domesticate Western scientific knowledge have gained individual, governmental, and nongovernmental interests at both the national and continental levels. For example, the Lagos Declaration and Call to Action on Science Communication and Public Learning and Understanding of Science (PLUS) was developed at the 2016 2nd African Conference on Emerging Infectious Diseases and Biosecurity. This notion is also addressed in “Priority 3” and elaborated in Chapter 6 of the African Union’s 10-year Science, Technology, and Innovation Strategy, which was developed during the 23rd Ordinary Session of the African Union Heads of State and Government Summit in June 2014.³⁵ Grace Kago and Muhamed Cisse give a list of nonprofit organizations that participate in relevant science across Africa. These include Eh! Woza, ProjeKt Inspire, Yiya Solutions, Ikala STEM, Practical Education Network (PEN), Global Lab Network, Super Scientist, Travelling Telescope, Mavis Talking Books, MOBILELABO, PlayAfrica, Under the Microscope (UTM), New Education for Radical Development (iNERDE), Fun and Education Global Network (FEGNe), and The STEM Impact Center Kenya.³⁶ As significant as these platforms are in simplifying and circulating scientific education among the younger generation, they are still based on colonial languages. According to Thiong’o, foreign languages marginalize indigenous languages and cultures while also preventing

³³Meighan, Paul J. “Decolonizing the digital landscape,” 402.

³⁴Taofeeq Adebayo, “Translanguaging in Science Education,” 20

³⁵ Kago, G. and Cisse, M. “Using African Indigenous Languages in Science Engagement to Increase Science Trust”, *Front. Commun.* 6:759069. doi: 10.3389/fcomm.2021.759069

³⁶ Kago and Cisse, “Using African Indigenous Languages in Science Engagement to Increase Science Trust,” 2.

individuals from engaging in meaningful interactions.³⁷ According to Adebayo's observations from the school's experiment, students who had previously rarely engaged with their teachers and colleagues displayed excellent knowledge of the key scientific disciplines when engaged in Yoruba.

Although researchers have stated that the diversity of African languages is a significant barrier to promoting science in indigenous languages, linguistics scholars have proposed solutions by categorizing African languages into three groups: inter-African languages, which are spoken across borders; languages with the greatest number of speakers; and language harmonization across linguistic families and common orthographies. In any event, the language of education should not be a barrier.³⁸ For instance, Nigeria is home to about 500 languages. Overall, Hausa, Igbo, and Yoruba are widely spoken throughout the country. There are several other minority languages such as Tiv, Jukun, and Birom.³⁹ Pidgin English, a hybrid or domesticated version of English, has also gained popularity. However, ethnic politics has revealed that Hausa, Igbo, and Yoruba communities are fiercely protective of their languages' decline within Nigerian society. They seize every opportunity to express their culture, traditions, and language in various ways. According to Statista's ethnic distribution in Nigeria in 2018, Yoruba account for 15.5% of the population.⁴⁰ In addition, the Yoruba are extensively distributed throughout West Africa. They are also commonly found in countries such as Brazil, Cuba, and others around the world.⁴¹ The Yoruba language is preserved through music, festivals, arts, and other types of intangible heritage. It has one of the most uniform language orthographies in Africa. As Achille Mbembe points out, a return to indigenous languages can help modify the dominant perception of Africa as a people without history, culture, or tradition.⁴² This, he claims, will provide Africa much-needed subjectivity.

³⁷Tuwe, Makanaka "Why Decolonization Starts with Reclaiming Language", June 7, 2028. <https://www.vice.com/en/article/why-decolonisation-starts-with-reclaiming-language/>

³⁸ Bamgbose, Ayo. "Education in Indigenous Languages," 61–62; Kago and Cisse, "Using African Indigenous Languages in Science Engagement to Increase Science Trust." 2.

³⁹Igboanusi & Peter, "The Language-in-Education Politics in Nigeria,"

⁴⁰Dokua Sasu, D. "Distribution of Ethnic Groups in Nigeria, Statista," December 12, 2022. <https://www.statista.com/statistics/1203438/distribution-of-ethnic-groups-in-nigeria/>

⁴¹ Many Yoruba found in these places are product of enslavement between 1500 and 1900.

⁴²Mbembe, A. *Out of the Dark Night: Essays on Decolonization*, (Columbia University Press, 2021). <http://www.jstor.org/stable/10.7312/mbem16028>.

Incorporating a wide range of indigenous scientific terminology into the global knowledge system can provide fresh insights.

Since the first video about the life cycle of a mosquito was published, other videos have appeared on Science in Yoruba's official social media platforms—most notably Facebook and TikTok. The Facebook page has been the most active, with over four hundred thousand (400,000+) followers.⁴³ Since its inception in 2004, Facebook has evolved from a simple social engagement platform into a powerful socioeconomic and political instrument that links viewers globally. Facebook's engagement is defined by the various thumbs ups, comments, and the share button, which allows page fans to spread information on their pages. Not only do the shared contents circulate extensively, but they also aid to gain new followers through others. Issie Lapowsky captures the importance of the 'Liked' button aptly:

The Liked button fed human being (sic) constant craving for validation by turning every post into a popularity contest. Likes came to divine corporate decision-making. They become informal poll tests for profession, because what are influencers if not people who are well Liked, they get paid to push products for a living?⁴⁴

SiY is intended to convey scientific knowledge to two groups of individuals. The first audience category includes secondary and postsecondary students studying chemistry, physics, biology, anatomy, climatology, mathematics, and medical sciences. Targeting this group of students will not only challenge the foundation of language imperialism but also equip the younger generation to value, promote, and adapt indigenous languages and African cultural and linguistic terminology to expand scientific knowledge. The second group of the audience primarily consists of individuals without a Western education. The democratization of internet access and an increase in smartphone users have led to the widespread dissemination of information on social media. For SiY, as preliminary findings suggest, access to smartphones also represents access to knowledge.

⁴³Adebayo, interview.

⁴⁴Lapowsky, I. "15 Moments That Defined Facebook's First 15 Years", *Wired*, February 4, 2019. <https://www.wired.com/story/facebook-15-defining-moments/#:~:text=Zuckerberg%20debuted%20Facebook%20Ads%20and,attended%20by%20hundreds%20of%20marketers.>

Therefore, instead of engaging with much unproductive comic content, SiY aims to address a significant gap. In addition to students who require scientific knowledge to develop critical thinking as future scholars, lay audiences also enhance their capacity to learn new ideas.

SiY video content is primarily rendered in Yoruba. For Adebayo, knowledge creation is a mutual process between the creator and the receiver. In creating the content, Adebayo researches his topics through literature consultations and conversations with experts in the field and notable indigenous leaders in Yoruba culture, history, and science. Additionally, Adebayo implements a feedback mechanism that enables him to periodically share basic information about his ongoing project and solicit opinions on suitable terminologies that most accurately capture specific terms in Yoruba from his audience. The feedback model has not only enhanced the followers' confidence in contributing to knowledge production but has also transformed them from passive receivers into active participants. More importantly, Adebayo has significantly expanded his Yoruba vocabulary.⁴⁵

One example of a feedback mechanism is a video on the human skeleton. In the video, Adebayo invites his audience to deliberate on the appropriate terms that best describe the skeleton in Yoruba. Although he suggested the following terms: "Poolo," "Egboro," and "Efon," based on his readings and conversation with the professionals, he concludes that whichever term is agreed upon by his audience will eventually be adopted and publicized. It is assumed that employing a common Yoruba term will benefit students by facilitating its mastery and application in their learning and exams. The ability of a follower to share such content has also contributed to the circulation of knowledge and increase in followership. As the Science in Yoruba Facebook page survey shows, the video content ranges from one minute to five minutes. While this time frame may seem insufficient to express the intricacy of some of the topics mentioned on the page, it is worth noting the extensive explanations and images used to address the subject. When necessary, a follow-up video is also posted to elucidate and address intriguing questions from the audience.

A video that has become a supplementary source for biological and medical students in some Nigeria's universities is the "Digestive System." In this video, the author covers the basics of the digestive tract, from food consumption to digestion, utilizing Yoruba terminology that students are

⁴⁵ Adebayo, interview.

already familiar with. Because the kids are fluent in the Yoruba language, understanding the digestion process is much easier. Teachers in secondary schools and colleges are increasingly depending on these movies to provide practical examples to their students.⁴⁶ Astounded by using Yoruba to convey difficult, complex scientific knowledge, SiY has enhanced their expertise and demonstrated that Yoruba can explain complex terminologies. According to Adebayo, most feedback encouraged his morale to continue developing strategies to preserve the platform and the project. In addition to the Facebook page, Science in Yoruba on TikTok has over 100,000 subscribers. Thanks to social media, Adebayo and his team managed their human and capital resources more effectively. Although transitioning from physical classrooms to virtual platforms was unexpected, it has reduced the financial and human capacity required to attend physical sessions while also addressing another limitation. In essence, social media has helped serve two audiences while also improving the project's future trajectory.

Conclusion

In this article, I describe how Science in Yoruba has transformed the creation and dissemination of scientific knowledge in Nigeria. Predominantly composed in Yoruba, SiY provides opportunities to strengthen long-standing campaigns to promote indigenous languages as a medium of instruction in our educational system. It not only facilitates the creation and sharing of information, but it also enhances student participation and enthusiasm for their languages. SiY has demonstrated that the Yoruba language can express complex scientific information. The project, which began as a physical classroom teaching experiment, has evolved into centralized content creation that uses social media to contribute to the debate over decolonizing language. The ability of the founder to adopt feedback mechanisms and dedicate time to engaging with experts in the fields of science, culture, history, and indigenous knowledge systems fosters its credibility and continued acceptance as an authentic knowledge producer. Indeed, local, national, and global accolades that the promoter has enjoyed underscore its contribution to the decolonization debate.

⁴⁶Adebayo, interview.

Interview

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Images

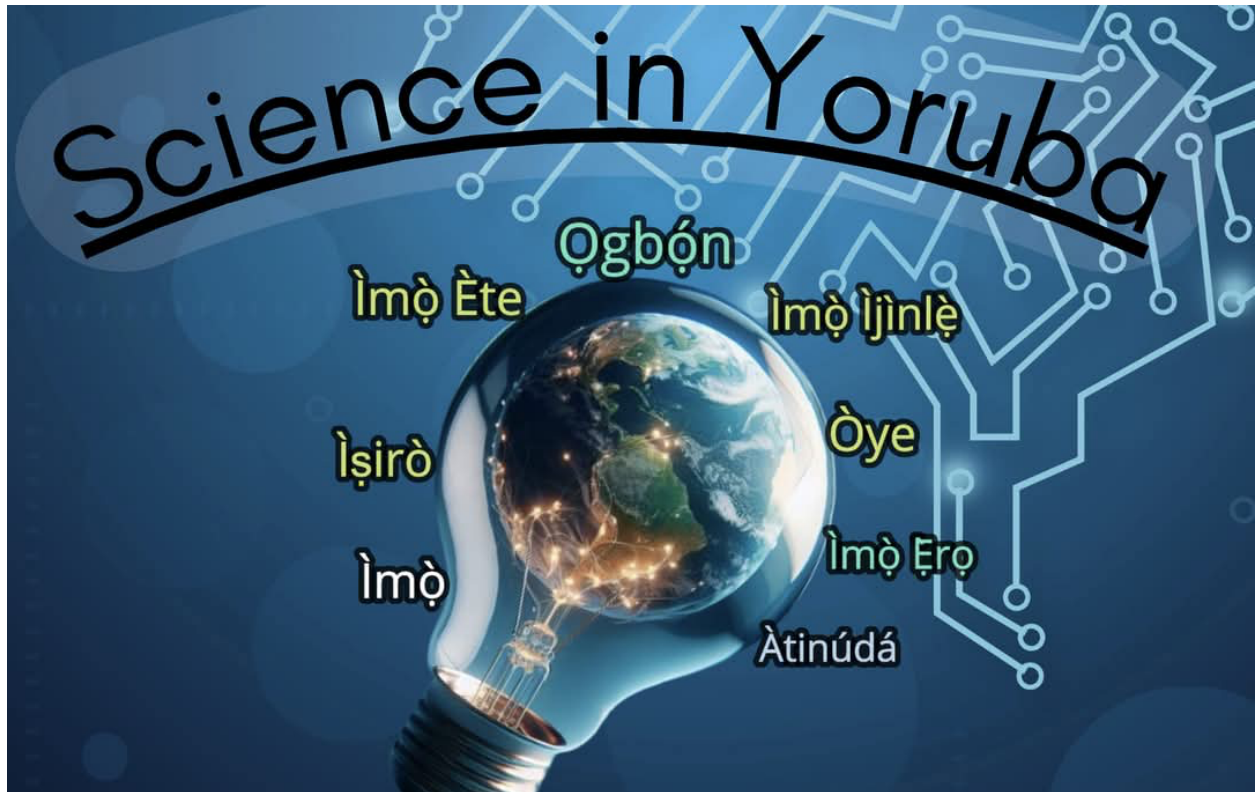
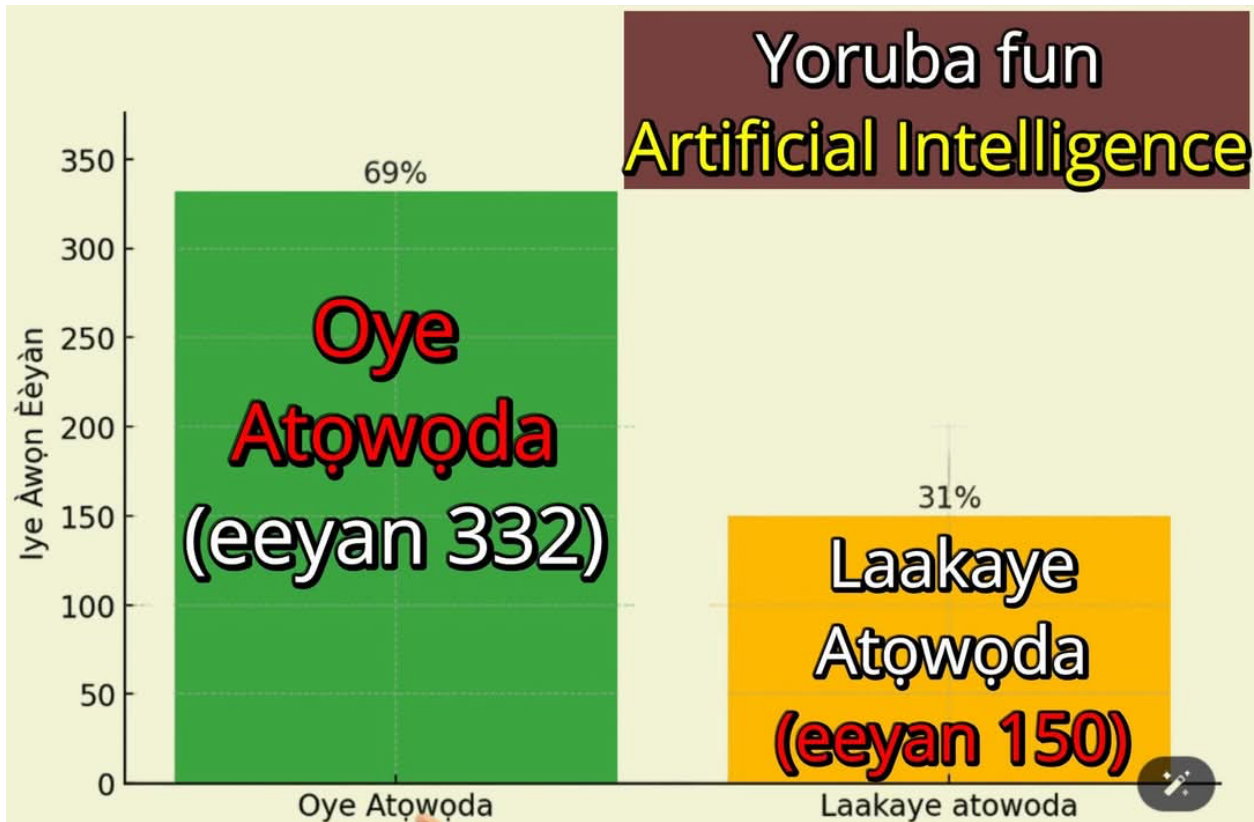


FIGURE 1.1 Facebook background image of Science in Yoruba, indicating the platform's knowledge diversity. *Source:* The Science in Yoruba Facebook page. <https://www.facebook.com/share/19G6SzqJrP/>



Esi lati:
 Facebook
 Twitter
 Instagram
 TikTok

Ago 12 oru, AIY,
 Ojo 3, Osu 4, 2025

@Sciencein
 Yoruba



| Taofeeq Adebayo

FIGURE 1.2. Followers’ responses across four social media platforms regarding the correct term for “artificial intelligence” in Yoruba. *Source:* The Science in Yoruba Facebook Page, April 4, 2024.

Báwo ló ẹ̀e rí lẹ̀dọ̀ yín?

Truth = òtító, òdodo

Fact = òkodoro

Intelligence = òye (Yai 1996)

Understanding = àgbóyé

Existence = wíwà

Reality = àbùdá-wíwà (????)

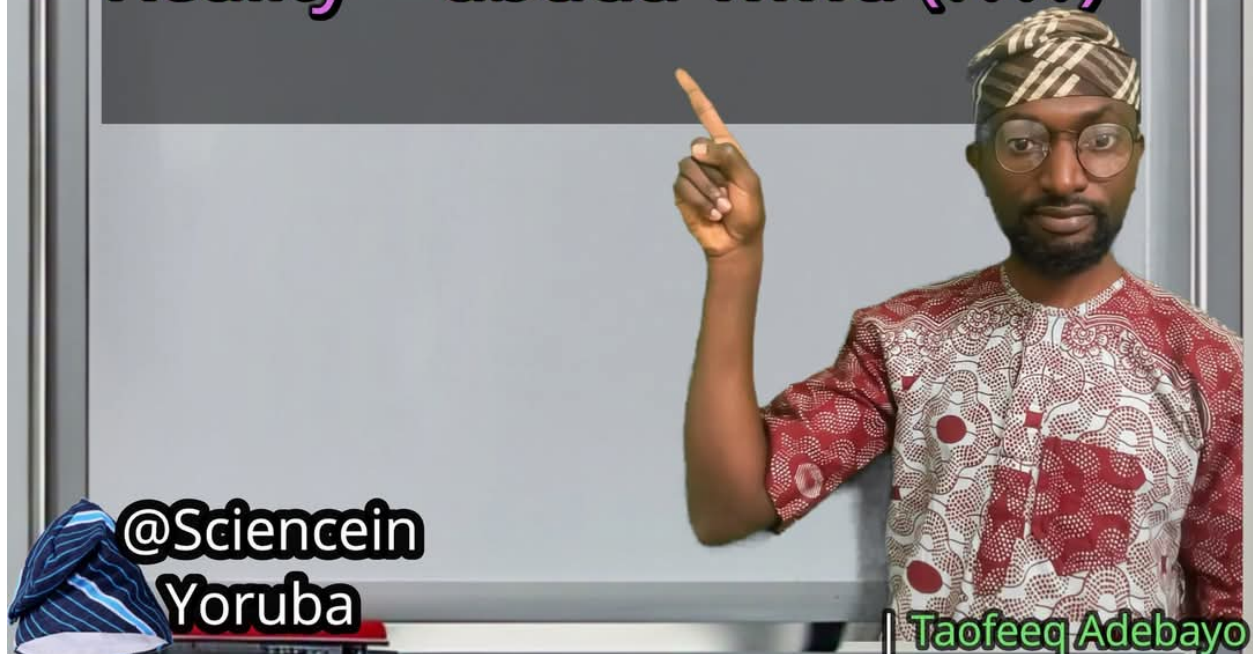


FIGURE 1.3. The founder, Taofeeq Adebayo, uses the image to collect responses from followers to identify the best Yoruba terms that match the outlined English words. *Source:* The Science in Yoruba Facebook page, March 21, 2024.