EFIWE
Master Future Skills. Even Offline.

Future Skills Program Report

IMPLEMENTING PARTNERS:

Teach for Nigeria

Gbenopo Community Grammar School
Methodist Primary School
Ijebu-Ode Muslim College
Itamapako High School
Wesley Primary School
African Church Grammar School
Araromi Senior Secondary School
Femi Gbajabiamila Secondary School
Lisabi Nursery & Primary School
Lagos City College

Grandmates Schools

LOCATION:

Lagos and Ogun State, Nigeria



DURATION:

Apr - Jun 2026

efiwe.com

WELCOME!

When we partnered with **Teach For Nigeria** to run our first structured coding pilot in Nigeria, we were testing one question above all others: could mobile-first, offline-capable coding education work inside real public schools, in real conditions, delivered not by software engineers but by classroom educators who had never previously taught code?

The answer is yes.

Ten TFN Fellows across **10 schools** in Lagos and Ogun State spent eight weeks introducing Efiwe to their students. Every single one of them finished the pilot more confident than when they started. Not a single Fellow rated their likelihood to recommend Efiwe below an 8 out of 10. The average recommendation score across all ten Fellows was **9.2** out of 10.

But the numbers are only part of the story.

One Fellow described the moment a student successfully built a webpage in VS Code using concepts she had learned entirely on Efiwe. Another described the specific value of the lives system, not as a game mechanic, but as a human intervention: a student had become so absorbed in the HTML course that the lives limit was the only thing that gave her the break she needed. A third Fellow watched students struggle repeatedly with a challenge, cycle through the AI feedback, and finally crack it, and described the joy on their faces as the most compelling proof of the platform's design.

These aren't anomalies. **They are the pattern.**

When we built Efiwe, the founding conviction was simple: talent is everywhere, but opportunity is not. Nigeria is one of the most vivid illustrations of that gap. It is home to tens of millions of young people with genuine curiosity, creativity, and hunger to build things, and almost no credible, affordable pathway into digital skills education. Computer labs are the exception. Laptops are out of reach. Internet is expensive and inconsistent. And yet smartphones are everywhere. That is the window Efiwe was designed for.

For me, who had watched students drop out of coding programs across Africa, not because they lacked ability but because the platforms assumed conditions they did not have, Nigeria was always going to be the first and most important test. For Abhinav, who had



ABHINAV NEGI & CHIDI NWAOGU
Founders of Efiwe

seen the same pattern in remote Himalayan villages in India, the lesson was identical: the barriers are not about talent, they are about the assumptions baked into how education is delivered. For Precious, who has spent years building the institutional relationships that translate a platform's promise into real-world deployment, this pilot was the culmination of months of work with Teach For Nigeria to design a partnership built on honest evidence rather than goodwill alone.

We chose TFN Fellows deliberately. Not because they were coding teachers, but precisely because they were not. They were **classroom educators** who had already shown initiative in bringing digital tools into **under-resourced environments**. If Efiwe could only be delivered by people who already knew how to code, it could not reach the students who needed it most. The Fellows proved it can be delivered by anyone who shows up with curiosity and commitment.

What this pilot also revealed, clearly and honestly, is where the work continues. Device access is the dominant constraint in Nigerian schools. Shared phones, borrowed devices, and students without any personal smartphone were the single most cited obstacle across the pilot. Also, school schedules left little room for coding sessions.

We are grateful to every Fellow who submitted honest feedback, to every student who showed up to an optional coding session before or after a full school day, and to Teach For Nigeria for building a partnership on evidence rather than assumption. This report documents what happened, what worked, what did not, and what comes next.



CHIDI NWAOGU
Co-founder / CTO of Efiwe

THE CONTEXT: WHY NIGERIA, WHY NOW

Nigeria is home to the **largest youth population in Africa**. It is also one of the clearest illustrations of the global digital divide in education. Public school infrastructure is severely underfunded. Computer labs are either absent, non-functional, or accessible only to the most urban and advantaged institutions. Internet connectivity is expensive and unreliable. The majority of students who want to learn digital skills have no credible pathway to do so.

What Nigerian students do have, in growing numbers, is smartphones. And for Efiwe, **that is enough.**

The scale of the opportunity here is not abstract. Nigeria's population is projected to become the third largest in the world by **2050**, and the median age is currently under **18**. This is a country in which the majority of the population is young enough to build an entire career in a digital economy that does not yet fully exist but is coming fast. The jobs that will define Nigeria's economy over the next two decades will require digital fluency as a baseline. The students sitting in public school classrooms in Lagos and Ogun State today are the workforce that will fill those roles, or be locked out of them, depending almost entirely on whether quality digital skills education reaches them before the window closes.

That is the stakes. That is why this pilot matters beyond what any single set of engagement numbers can capture.

Before Efiwe, the options available to a student in a Nigerian public school who wanted to learn to code were, in practice, very limited. They could attempt to follow tutorials on YouTube if they had consistent data and a large enough screen. They could pay for a private bootcamp if they or their family could afford one. They could wait for a school to acquire computer lab equipment that, in most cases, never arrived. Or they could give up. The overwhelming majority gave up, not because they were unwilling, but because the tools that existed were built for people **who already had advantages**.

The infrastructure assumptions embedded in most coding education platforms are so deeply normalised that they barely register as assumptions at all. You need a laptop. You need broadband. You need to be comfortable in English. You need either money for a subscription or an institutional affiliation that has already paid for one. In Nigeria's public school system, students routinely have none of these things. The result is not a skills gap. It is an access gap masquerading as a skills gap, and the distinction matters enormously for how you try to close it.

Efiwe was built on the conviction that the right response to an access gap is to **remove the access requirement,** not to find a slightly cheaper version of the same inaccessible product. That means building for smartphones rather than laptops. It means building for offline rather than broadband. It means supporting 246 languages rather than defaulting to English. It means making the core platform free rather than gating learning behind a subscription.

Teach For Nigeria was the right partner for this pilot for the same reasons that Efiwe was the right platform. TFN does not work from the assumption that under-resourced schools need better equipment before they can have better outcomes. It works from the assumption that the right person in the right classroom, with the right tools and support, can produce transformative results regardless of infrastructure. That is a philosophy that aligns directly with Efiwe's design. Both organisations are betting on the same thing: that the constraints are real but not final, and that the way to serve students in difficult conditions is to design specifically for those conditions rather than around them.

The pilot covered 10 schools across **Lagos State and Ogun State**, reaching students in urban, peri-urban, and lower-resource school settings. It ran from **May through June 2026**, with ten TFN Fellows introducing Efiwe's HTML, CSS, and JavaScript courses to their students over an 8-week active learning period.

THE SCIENCE: WHY EFIWE WORKS

Efiwe was not built on intuition. Every core design decision reflects decades of peer-reviewed educational research. Understanding why the platform is designed the way it is helps explain why it produced the results it did in Nigerian schools.

Mobile-first design produces real learning gains. Research has established that when learning applications are designed specifically for smartphones rather than shrunk down from desktop software, students show a measured improvement score of 0.523. This is a statistically meaningful effect, and it matters enormously in a context where students have phones but not laptops.

Gamification dramatically increases both motivation and outcomes. A meta-analysis of over 5,000 students across 49 experiments found that gamified learning produces an overall improvement score of 0.822, with motivation specifically scoring 2.206, one of the highest single-method effects ever measured in educational research. For coding education in particular, where dropout is the dominant failure mode, this matters more than almost any other design choice. The combination of game rules (lives, streaks, points), game action (challenges that escalate in difficulty), and game feel (visible progress, badges, celebrations) produces an improvement score of 1.285. Efiwe incorporates all three. The fellows in this pilot observed this directly.

AI personal tutoring improves confidence and persistence. Research comparing students who received AI-assisted tutoring against those who did not found significantly higher scores in computational thinking skills, coding confidence, and motivation to continue learning. The advantage of AI at scale is that it gives personalised feedback to every learner simultaneously, something no classroom teacher can do, and in Nigerian schools with overcrowded classrooms and under-resourced teachers, this is especially significant.

Offline learning produces better outcomes, not just more access. One of the counterintuitive findings in the research is that students learning offline outperformed those learning in online or mixed-connectivity settings. The reasons are practical: without the anxiety of a connection dropping or the



ABHINAV NEGI
Co-founder / CEO of Efiwe

distraction of data costs, learners can focus entirely on the material. In Nigerian schools, where internet access is expensive and inconsistent, this is not an edge case. It is the standard condition.

Project-based learning builds transferable skills. Decades of research confirm that students who build real things retain more, stay more motivated, and develop skills they can actually apply. Efiwe's challenge structure, building from a first HTML tag to a complete multi-section webpage, is a direct implementation of this approach. One Fellow in this pilot reported that a student used knowledge gained from Efiwe to design a webpage in VS Code entirely independently. That transfer is not accidental. It is what the curriculum was designed to produce.

These principles are not listed here as theoretical justification. They are the design brief from which Efiwe was built, and the lens through which the results of this pilot should be read.

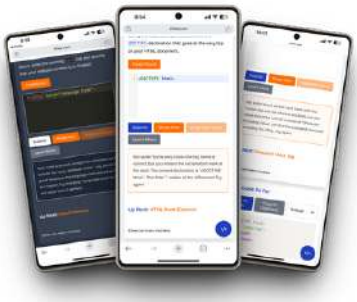
When a Fellow describes a student who kept coming back to a challenge she had failed twelve times, cycling through AI feedback until she solved it, that is not a story about a particularly determined student. That is gamification and immediate AI feedback doing exactly what the research says they do. When a Fellow describes the offline capability as the moment the platform's promise became real in their classroom, that is not a positive review. That is documented evidence that the design works in the conditions it was designed for.

These demonstrate why **Efiwe's approach is built to work in schools with low-resource classrooms**.

WHAT IS EFIWE?

Efiwe is a mobile-first, multimodal AI coding education platform that enables users to learn coding through interactive, gamified challenges, guiding them step by step, all from any smartphone. It stands out with its offline capabilities, AI-driven personalized feedback, voice and sign-language based learning for low-literacy and deaf or hard-of-hearing learners, with availability in 246 languages, making learning to code accessible and fun.





PERSONALIZED FEEDBACK WITH AI

We use advanced AI techniques to provide **adaptive feedback** based on a learner's progress and learning behavior. Our on-device AI analyzes each coding challenge a learner completes, adjusting how information is presented to them. This way, a learner can follow along without feeling bored or overwhelmed.

SMART ERROR DETECTION & GUIDANCE

When a learner makes an error in their code, Efiwe doesn't just point it out; it **prioritizes the most important issues** based on how often they occur. It intelligently adjusts feedback so the learner can focus on what matters most. Whether it's a simple issue or a deeper logic problem, Efiwe helps them tackle it step by step.





HINT PREDICTION

Struggling to move forward? Efiwe's AI predicts the **most relevant hints** to help each learner solve coding challenges. Based on the complexity of the problem and a learner's previous errors, it provides just the right amount of guidance to help them understand without giving them the answer outright.

LEARNING THAT ADAPTS TO EACH LEARNER

Efiwe doesn't just track a learner's progress; it learns from it. The more someone uses the app, the better it understands their strengths and weaknesses. By analyzing their interactions, Efiwe **adapts to their learning pace**, ensuring that they're always challenged without being overwhelmed.



AVAILABLE PROGRAMS:

HTML — 191 Challenges
CSS — 298 Challenges
JavaScript — 488 Challenges
Tailwind — 154 Challenges
Python — 420 Challenges

THE FELLOWS: WHO THEY WERE

The ten Fellows selected for this pilot were not coding teachers. They were classroom educators who had already shown initiative in **integrating digital tools** into their schools, people who had built STEM clubs, run Excel workshops, introduced students to Scratch, or launched programmes bringing girls into technology. They came from the TFN 2024 and 2025 cohorts and were spread across Lagos State and Ogun State, with three Fellows based in Lagos and seven in Ogun. They were **nominated by their Coaches** based on existing digital work and initiatives, not on prior coding knowledge. That distinction was intentional. The pilot was designed to answer whether Efiwe could work when introduced by educators who were learning alongside their students, not by technical specialists parachuted in from outside.

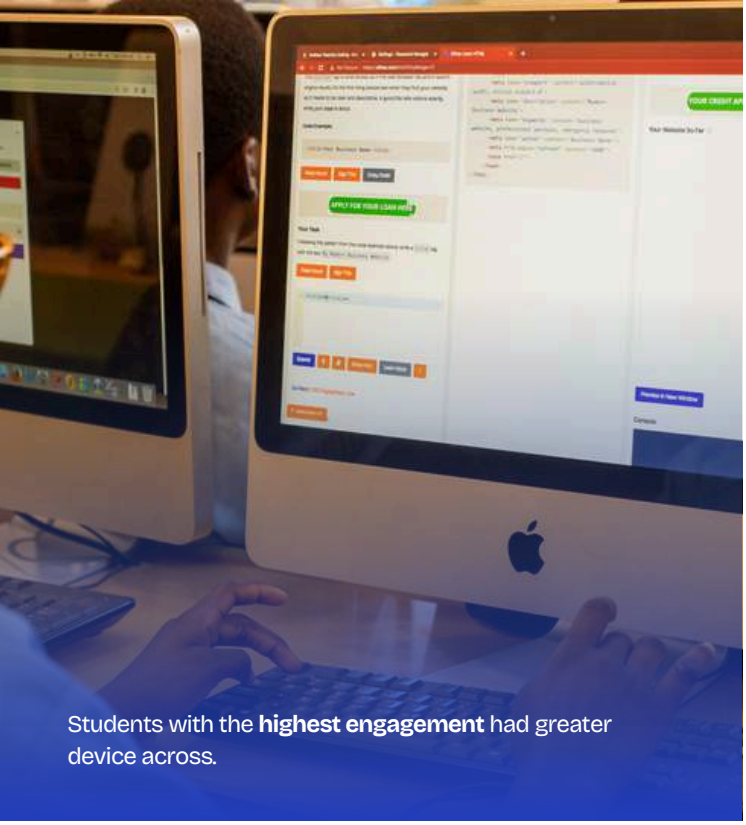
What united all ten Fellows was not technical background. It was a prior commitment to expanding what was possible for their students within constrained environments, and a genuine curiosity about coding for themselves, not only as a tool to hand to their students but as a skill they wanted to develop personally. The nomination process was designed to surface that quality, and the Fellows it identified reflected it clearly.

In Ogun State, **Kehinde Alabi** was already training students at **Gbenopo Community Grammar School** in Excel, Canva, data handling, and digital communication, having empowered over 50 students in tech skills for learning and creativity. **Victoria Onaolapo** at **Methodist Primary School** in Ewekoro brought data analysis skills in Excel and KoBoToolbox alongside basic programming knowledge in Python and C++, and had been building simple websites and creating data-driven solutions before the pilot began. **Kehinde Fagbola** at **Ijebu-Ode Muslim College** was a STEM educator using G-Mind and Microsoft Office Suite who had already empowered over 300 students and 100 teachers with digital and AI tools, one of the widest existing reach of any Fellow in the cohort. **Taiwo Ogunmoriye** at **Itamapako High School** in Ijebu-Ode had been integrating digital tools into science teaching in low-resource settings, with a specific focus on making learning practical, engaging, and future-ready. **Oluwasegun Mogbojur**i at **Wesley Primary School** in Sagamu was the founder of the BrainBox Initiative, which provided coding, digital literacy, and AI training for students and teachers, with over 100 students already building projects on Scratch before Efiwe arrived. **Habeeb Shittu** at **African Church Grammar School** in Abeokuta was championing STEM projects and tech initiatives, and his BTC Project TechHer had been actively drawing more girls into technology and digital literacy. **Taiwo Tejuosho** at **Lisabi Nursery & Primary School** in Ilogbo was a digital literacy advocate integrating AI tools, data skills, and digital communication into daily classroom practice.

In Lagos State, **Ebenezer Ojo** at **Araromi Senior Secondary School** in Iganmu ran E-Lead Academy, through which he delivered computer skills, coding, Excel, and STEM exhibitions to students, specifically addressing the post-secondary digital competence gap that he had observed leaving school leavers unprepared for the workforce. **Mustapha Razaq** at **Femi Gbajabiamila Junior Secondary School** had established a STEM Club for learners and was himself a software engineering aspirant actively building skills alongside his students, which made him one of the most naturally aligned Fellows in the cohort with Efiwe's philosophy of learning by doing. **Opeoluwa Yusuf** at **Lagos City College** in Yaba had been running coding classes since the term began and was leading a STEM Web Development Club whose students were already writing code and developing web design skills before the pilot started, making her school one of the most advanced starting points in the cohort.

The range of existing digital capacity across these ten Fellows was wide, and that was by design. At one end, Fellows like Opeoluwa Yusuf and Victoria Onaolapo came in with coding exposure and existing student-facing coding programmes. At the other end, Fellows were experienced digital literacy advocates who had not yet written code themselves. Efiwe needed to work for both groups, as a professional development tool for the more experienced and as a genuine from-scratch learning experience for those starting with no coding background. The pilot data shows it did. **Every Fellow finished the active pilot period more confident than when they started**, regardless of where on that spectrum they began.

The geographical spread also mattered. Lagos schools brought higher device access rates and stronger average connectivity, but also more competition for student time and attention in a dense urban environment. The Ogun State schools brought a wider range of infrastructure conditions, from moderately connected peri-urban settings to schools where offline mode was not a feature but a necessity. That spread wasn't incidental. **It was the point.** A pilot that only tested Efiwe in favourable conditions available would not have produced evidence worth acting on.



Students with the **highest engagement** had greater device across.

THE PILOT: WHAT HAPPENED

Fellow Confidence

All 10 Fellows submitted check-in responses. The results on Fellow confidence are unambiguous.

90% of Fellows reported being "much more confident" after starting the pilot, saying they could troubleshoot the platform and guide students easily. The remaining 10% reported being "somewhat more confident." Not a single Fellow reported no change or decreased confidence.

This outcome matters for scale. If Efiwe can only be delivered by people who already know how to code, it cannot serve the millions of students in under-resourced schools who need it most. The Teach For Nigeria pilot demonstrates that educators with existing digital curiosity, and no prior coding experience, can become confident platform facilitators within weeks.

One Fellow's specific reflection captures what this confidence meant in practice: **"I can troubleshoot and guide students easily."** That is not a passive outcome. It is the functional definition of a capable facilitator.

Student Engagement

Student engagement was distributed across three levels, and understanding that distribution is important for honest interpretation of the results.

30% of Fellows reported "very high" engagement, with students self-initiating learning and asking for more. These were contexts where students had personal device access, where the gamification mechanics were landing, and where Fellows had been able to create structured time for coding sessions.

30% of Fellows reported "moderate" engagement, with students engaging during sessions but requiring prompting to continue on their own. This reflects the device access constraint: students who were dependent on shared or borrowed phones could not build daily habits the way learners with personal devices could.

40% of Fellows reported "mixed" engagement. This group reflects the widest range of contexts in the pilot, from schools in Ogun State with very limited device access to settings where engagement varied by student rather than by school. The honest reading here is not failure but condition: engagement was directly tied to whether students could access the platform independently, which in turn depended on whether they had personal devices.

The three Fellows who reported very high engagement all operated in contexts where students had greater device access, most notably Opeoluwa Yusuf's **Lagos City College**, whose students were already coding before the pilot began.

Platform Performance: What Fellows Rated

Fellows were asked to rate four platform dimensions on a scale of 1 to 5 during the pilot.

Ease of getting started (setup and first challenge): 4.0 out of 5. Eight of ten Fellows rated this 4 or 5. The setup experience, which requires a one-time internet connection to install the web app and create an account, was rated positively by the majority. The two lower scores came from Fellows whose students encountered difficulties during initial setup, which is addressed further in the barriers section.

Clarity of challenge instructions: 4.1 out of 5. Eight of ten Fellows rated this 4 or 5. The positive reception is consistent across school levels, with one important exception noted by a Fellow working with primary school learners, who found that the text in some instructions was beyond the reading level of younger students.

Quality of AI feedback when students get something wrong: 4.3 out of 5. The highest-rated dimension. Nine of ten Fellows rated this 4 or 5. Multiple Fellows

described the AI feedback as the feature that most visibly differentiated Efiwe from any other tool they had encountered. One Fellow described students cycling through repeated incorrect attempts, receiving corrective feedback each time, and eventually arriving at the right answer with visible excitement. Another specifically praised the way the AI prioritised the most important errors rather than overwhelming learners with everything at once.

Offline reliability after initial setup: 4.0 out of 5. Seven of ten Fellows rated this 4 or 5. One Fellow explicitly described offline learning as the moment that validated the platform's design: students continued learning through a coding session despite unreliable internet, something that would have been impossible on any other platform they had previously used. The two lower scores reflect setup contexts where the initial offline caching had not completed properly before internet access dropped, a first-setup dependency rather than a platform reliability failure.

WHAT WORKED: MOMENTS FROM THE FIELD

The most valuable data in this pilot is not the averages. It is the specific moments Fellows chose to describe when asked to identify a single session where Efiwe clearly worked. Every response to this question was substantive.

The independence milestone. One Fellow described the moment when learners completed beginner tasks on their own after following the platform lessons, without instructor help.

"They were excited to see that they could actually do it themselves. I think it worked because the lessons were easy to follow and practice."

The experience of independent completion, not just understanding the concept but successfully writing the code without assistance, is the milestone that distinguishes real skill development from passive consumption.

The VS Code transfer. One Fellow reported that a student successfully designed a webpage in VS Code using knowledge gained entirely from Efiwe. This is direct evidence of skill transfer: the student moved



A student **receiving guidance** on how to use the Efiwe platform

from Efiwe's guided, feedback-supported environment to a professional development environment and applied what she had learned. This is exactly the outcome that project-based learning research predicts, and it happened within the first four weeks of the pilot.

The Read Aloud moment. One Fellow specifically named "Read Aloud" as the most effective feature of their experience with the platform, describing it as helping students with reading comprehension during challenges. This is a meaningful validation of an accessibility feature that was not originally designed for literacy support, but proved to be one in practice.

Offline learning in action. One Fellow submitted this specific example:

"Internet access was unreliable, but the students were still able to continue learning and completing coding lessons offline through the app."

In the context of Nigerian schools, where unreliable internet is not an exception but the norm, this is the platform's core promise fulfilled in practice.

The lives system as a learning design tool. One Fellow described a student who became so absorbed in the HTML course that she barely wanted to stop.

"The introduction of lives gave her the needed break."

This is an unexpected but important validation of a feature often misunderstood as a monetisation mechanic. In practice, it functioned as a pacing tool

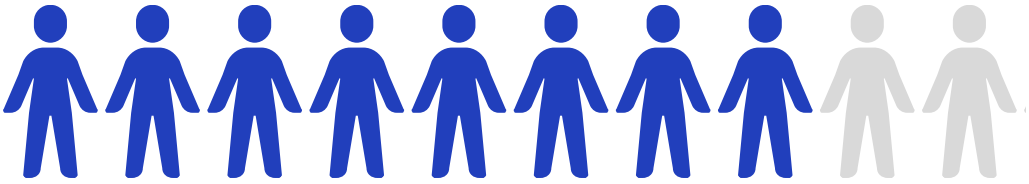
that protected learning quality and gave an over-engaged student natural breaks. The Fellow's framing of it as purposeful design, not an obstacle, is precisely how the feature was intended.

The joy of iteration. One Fellow described **"the joy on my learners when they pass certain stages on the platform after repeated trials due to the corrections Efiwe platform gives."** This is the gamification effect at work: the emotional response to finally solving a problem after repeated attempts, supported by AI feedback at each stage, produces the kind of engagement that keeps learners coming back.

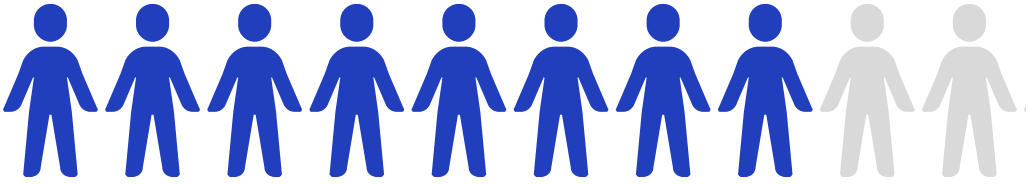
Early challenges working. One Fellow rated every prompt in every early stage as working perfectly, noting that errors only arose when students did not read the instructions carefully before attempting the challenge. Instructional design that produces failures only when students skip the instructions is, in fact, instructional design that is working correctly.

WHAT THE DATA SHOWS: PLATFORM RATINGS AT A GLANCE

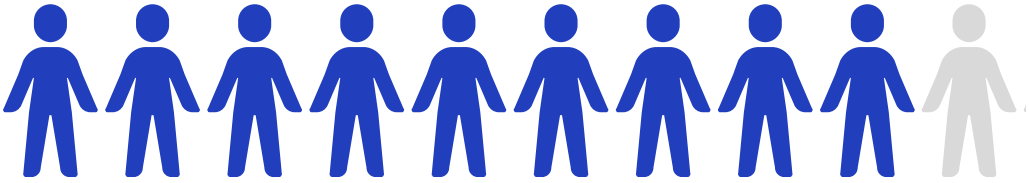
EASE OF GETTING STARTED: 80%



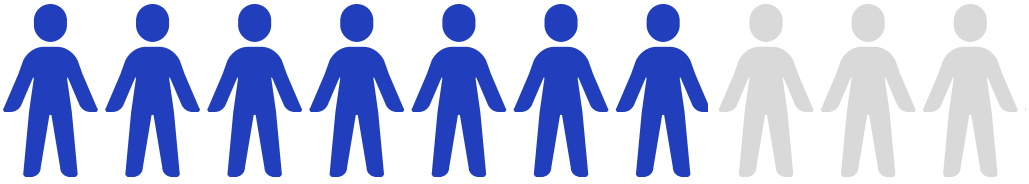
CLARITY OF INSTRUCTIONS: 80%



AI FEEDBACK QUALITY: 90%



OFFLINE RELIABILITY: 70%



The following summary captures how Fellows rated each core dimension.

EASE OF GETTING STARTED: 4.0/5
80% of Fellows rated this 4 or 5. The initial setup process worked well for most. The friction that did occur was concentrated in the one-time internet requirement for account creation and app installation, which created difficulty in schools where students have no personal devices and shared phones require coordinated setup timing.

CLARITY OF INSTRUCTIONS: 4.1/5
80% of Fellows rated this 4 or 5. Instructions were clear for secondary school learners across most contexts. The one consistent exception was primary school, where the text in some challenges exceeded the reading level of the students.

AI FEEDBACK QUALITY: 4.3/5
90% of Fellows rated this 4 or 5. This was the highest-rated dimension in the pilot. The AI feedback was consistently described as helpful, personalised, and meaningfully differentiated from anything else Fellows had seen. The one area for development flagged by multiple Fellows was that some students remained stuck even after receiving feedback, particularly at more advanced challenges, suggesting that feedback quality may need to escalate in line with challenge difficulty.

OFFLINE RELIABILITY: 4.0/5
70% of Fellows rated this 4 or 5. Offline reliability was strong once the initial caching was complete. Lower scores were associated with setups where internet access dropped before the first caching cycle finished, rather than platform instability.

THE MAIN BARRIERS

The pilot was designed to surface honest evidence, and it did.

Device access is the dominant constraint.
8 of 10 Fellows (80%) cited students not having personal devices as a major obstacle. This is not a barrier that Efiwe can solve through platform design alone. In the Nigerian school context, a significant proportion of students do not own smartphones or share devices with family members. Where students had personal devices, engagement was consistently higher. Where they did not, learning happened in sessions but could not sustain outside them. The implication for any wider adoption decision is direct: device access must be a parallel conversation to platform adoption.

School scheduling is a structural friction.
7 of 10 Fellows (70%) cited difficulty finding time in the school schedule. Coding is not yet a curriculum subject in most Nigerian schools. Fellows ran sessions as after-school clubs, within free periods, or as optional extensions of their primary teaching role. This worked in some contexts and created real friction in others. The Fellows who reported the highest student engagement were, without exception, those who had been able to carve out regular, recurring time slots for coding sessions rather than running them ad hoc.

Initial setup required coordination.
3 of 10 Fellows (30%) cited difficulty with the one-time web app setup. The setup process requires an internet connection and creates a specific coordination challenge in schools where students are using borrowed or shared devices: getting every student connected, account-created, and cached on the same occasion is logistically demanding. One Fellow reported that for some students' phones the learning page did not display after account creation. Investigation traced the root cause to a device storage issue: when a device's storage was full, the course startup process attempted to save data, failed, and stopped before it could finish loading, preventing the course from appearing. This was not a hardware compatibility issue at the lower end of the Android range, as initially suspected, but a storage condition that could affect any device regardless of specification.

The issue was reported, investigated and identified, and fully resolved the same day. The fix updated the course startup process so that a full storage condition no longer prevents the course from loading. The course now starts normally even when it cannot save data to the device. Tests across different storage conditions confirmed the fix held before the resolution was closed.

The speed of the response matters in the context of a pilot built on evidence. A platform issue surfaced by real Fellows in real schools was identified, fixed, and confirmed within the same day of being reported. That

is the kind of operational responsiveness that a school-based deployment requires, and it reflects the seriousness with which the Efiwe team treated the feedback coming out of this pilot in real time.

Local language interfaces went untested. This is the most significant finding that requires direct acknowledgment. Validating Efiwe's Yoruba and Igbo language interfaces was stated as a key deliverable of this pilot. The data shows that it did not happen. 5 of 10 Fellows reported their students used English and it was not a barrier. 4 Fellows had not tried the local language interfaces at all. 1 Fellow tried to switch to a local language interface and could not figure out how to do so.

This outcome requires honest interpretation. Fellows were shown how to change the platform language during the virtual onboarding session before the pilot began. The feature was not hidden from them. And yet, during the pilot, only one Fellow had attempted to use it, and that attempt was unsuccessful. The evidence points to a discoverability problem rather than a knowledge problem. Being shown something once in an onboarding session is not the same as being able to find it intuitively in the moment, weeks later, in the middle of a classroom session with students waiting.

The current language translation button sits in the footer of the platform, at the bottom of the page. In practice, that placement means it is rarely encountered during normal use. A learner or Fellow navigating through challenges, moving from one task to the next, has no natural reason to scroll to the footer. The feature exists, but its location removes it from the flow of the experience almost entirely.

The Efiwe team has identified this as a product priority and is actively working on a more prominent placement for the language translation button, one that puts it within the natural line of sight during active learning rather than requiring a deliberate search to find it. The fix is straightforward in principle. The lesson from this pilot is that discoverability and usability are not the same thing, and a feature that requires a user to already know where to look is, functionally, a feature that most users will never use.

The implication for any subsequent pilot, particularly one in northern Nigeria or in schools with lower English literacy, is that local language interface onboarding needs to go beyond a single demonstration in a virtual session. It needs to be a structured, in-session activity during the first week of the pilot, with Fellows actively switching their own platform language and walking students through the same process in real time, before the language button has been forgotten and the default of English has set in.



RECOMMENDATIONS & REQUESTS

When asked what single change Efiwe could make to improve the remaining four weeks of the pilot, each of the 10 Fellows gave a specific, actionable response. Taken together, these requests constitute the clearest product brief that could come from the field.

More granular progress tracking for admins. One Fellow described the difficulty of tracking which topics a specific learner had covered and how many challenges they had completed when the learner had already progressed to JavaScript. The admin dashboard shows activity including the number of completed challenges by a learner, but the Fellow wanted intricate challenge-level visibility by learner to support targeted intervention. This is a direct ask for richer group analytics.

Grouping challenges into labelled levels. Multiple Fellows suggested packaging the challenge sequence into named tiers, for example, Challenges 1-20 as Level 1, Challenges 21-40 as Level 2, and so on. The argument is that numbered challenge sequences (1 of 191, 2 of 191, etc.) can feel overwhelming to beginners, while named levels give learners a sense of completion at more frequent intervals and make it easier for Fellows to assign a manageable scope without saying "do at least 20 challenges." Notably, this grouping structure already exists in a different form in the platform's HTML course as six levels, and the Fellow who described this most specifically may have been working in a context where that structure was not visible or prominent enough during the sessions.

Shorter, more targeted instructions. This request came from a Fellow working with younger learners and reflects a real design consideration: the instruction text for some challenges is calibrated for secondary school and above, and primary school learners found it verbose. The ask was to keep instructions short, specific, and paired with a concrete sample to recreate.

Multi-account login on a shared device. One Fellow described the inability to log two accounts into a single device as a meaningful barrier in her specific context, where students share phones. The request is for a session-switching or account-toggling feature that would allow two or more students to use the same phone for their individual progress without either losing their data.

This piece of feedback led directly to a new feature launch. On June 20, 2026, Efiwe introduced **Account Switching**, a feature that lets multiple learners use the same device, each keeping their own progress, without ever needing to fully log out. A single device can now hold up to twenty saved accounts at once, and moving between them takes one tap.

Admin ability to edit student registration details. One Fellow requested that admins be given the ability to correct errors in student information after registration. This is a practical group management need that arises when students self-register and make errors in their name or email fields.

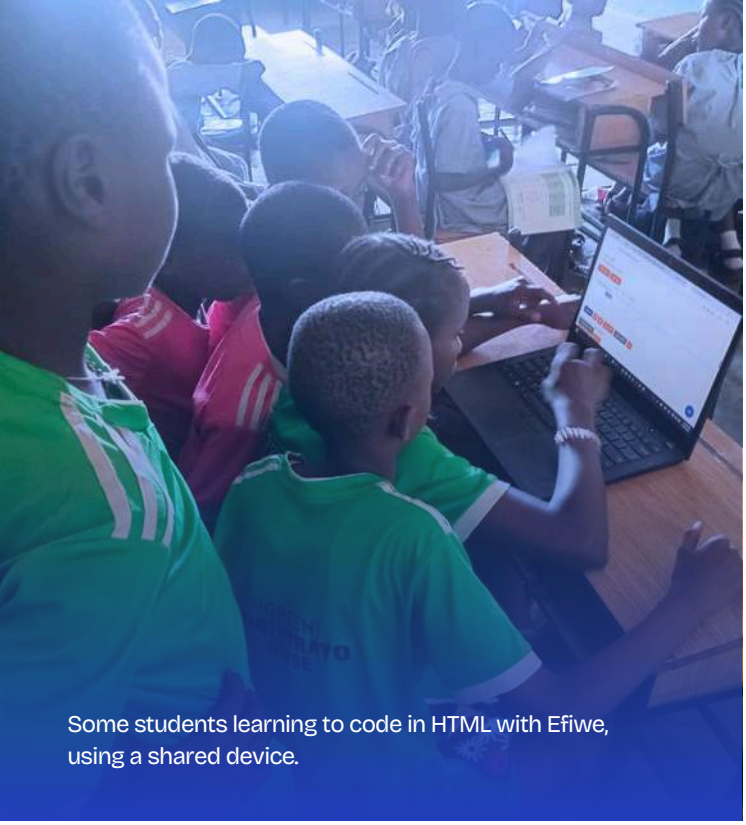
More explicit on-device AI correction responses. One Fellow asked for on-device (offline) AI feedback to be more explicit, noting that the current feedback was sometimes not detailed enough for students to self-correct without additional help from the Fellow.

This feedback informed a direct platform improvement. When a learner makes a mistake on Efiwe, the platform tells them what went wrong. Before this update, it would typically say something like "This is wrong, it should be this instead." That is helpful, but it does not explain why it is wrong or what specifically needs to change, which means a learner who is one typo away from the right answer gets the same flat correction as a learner who has misunderstood the concept entirely.

This new update makes a more useful distinction. When a learner makes a mistake, Efiwe first assesses how close the submission is to correct. If the learner is close, for example typing “consolee.log” instead of “console.log”, or “redd” instead of “red”, Efiwe no longer simply flags the line as wrong. It says something closer to "You're almost there! You have an extra letter e, remove it and you'll have it," or, if a character is missing, "You're almost there! You're missing the letter e, add it and you'll have it."

The distinction is similar to the difference between two ways a teacher might mark a piece of work. A less experienced teacher puts a red cross next to the wrong answer and writes the correct one alongside it. A more experienced teacher circles exactly what is wrong and writes a note explaining the specific thing that needs to change. This new update moves Efiwe's feedback from the first kind of marking to the second.

Video support. One Fellow suggested that adding short video explanations to complement the text-based challenges would make learning easier for students who struggled to translate written instructions into code. This is a direction worth



Some students learning to code in HTML with Efiwe, using a shared device.

monitoring as the platform continues to evolve.

Real-time group messaging. One Fellow asked for a feature that would allow group members to communicate via text if they are active on the platform at the same time. This reflects a genuine observation: students in the same school, on the same challenge, at the same moment would benefit from being able to compare notes and help each other, rather than feeling like they are learning in parallel isolation.

THE HOURS BURDEN: WHAT FELLOWS INVESTED

Fellows spent an average of **4.3 hours per week** on Efiwe-related activities, including their own learning, student sessions, and admin. The range was 2 to 6 hours.

For Fellows who were running coding sessions as an addition to their full teaching load, this investment was not trivial. The Fellows who reported the highest engagement among their students were also those spending the most hours. The clear implication is that the pilot's success was directly correlated with the time Fellows were able to carve out for it, which in turn depended on how much flexibility their school schedules and Coaches allowed.

Two Fellows spent only 2-3 hours per week and reported mixed student engagement. Four Fellows spending 5-6 hours reported either very high or good engagement. The relationship is not perfectly linear (one Fellow spending 3 hours reported very high student engagement, reflecting a school context where students were self-initiating), but the general pattern holds: more structured time investment from the Fellow corresponded to better outcomes for students.

SUMMARY OF KEY METRICS

Fellows: 10 across 10 schools (3 Lagos, 7 Ogun State)

Fellow confidence after pilot: 90% much more confident, 10% somewhat more confident, 0% unchanged

Student engagement: 30% very high (self-initiating), 30% moderate (session-based), 40% mixed

Ease of getting started: 4.0/5 (80% rated 4 or 5)

Clarity of instructions: 4.1/5 (80% rated 4 or 5)

AI feedback quality: 4.3/5 (90% rated 4 or 5)

Offline reliability: 4.0/5 (70% rated 4 or 5)

Average hours per week (Fellow time investment): 4.3 hours (range: 2-6)

Average recommendation score: 9.2/10

Fellows giving 9 or 10: 70%

Fellows giving 8: 30%

Fellows giving below 8: 0%

Top obstacle: Device access (cited by 80% of Fellows)

Second obstacle: School schedule constraints (cited by 70% of Fellows)

FELLOWS & STUDENTS ON EFIWE

FELLOW AT ITAMAPAKO HIGH SCHOOL

When I introduced the Efiwe coding program at my school, I was excited but also apprehensive. One of the biggest challenges was the learning environment: many students come from homes with limited access to technology, and most don't own personal devices such as smartphones or laptops. This made it difficult for them to participate consistently in coding activities.

To bridge this gap, I began lending my own phone and laptop to students during practice sessions. Even among those who did have access to devices, many initially preferred using them for entertainment rather than for learning to code. Encouraging students to see the value of coding felt like an uphill battle.

Despite these challenges, I stayed committed to the program. At first, I expected the senior students to show the most interest and grasp the opportunities coding could offer most quickly. Surprisingly, it was some of the younger learners who embraced the program with the most enthusiasm.

One student in particular, Victoria, stood out. An SS1 student, she showed remarkable dedication and consistency. Unlike many of her peers, Victoria doesn't own a phone or laptop, but she never let that limitation discourage her. Instead, she made it a habit to visit my office during every break period to practice coding, and would even remind me to bring my laptop to school so she could keep learning and improving her

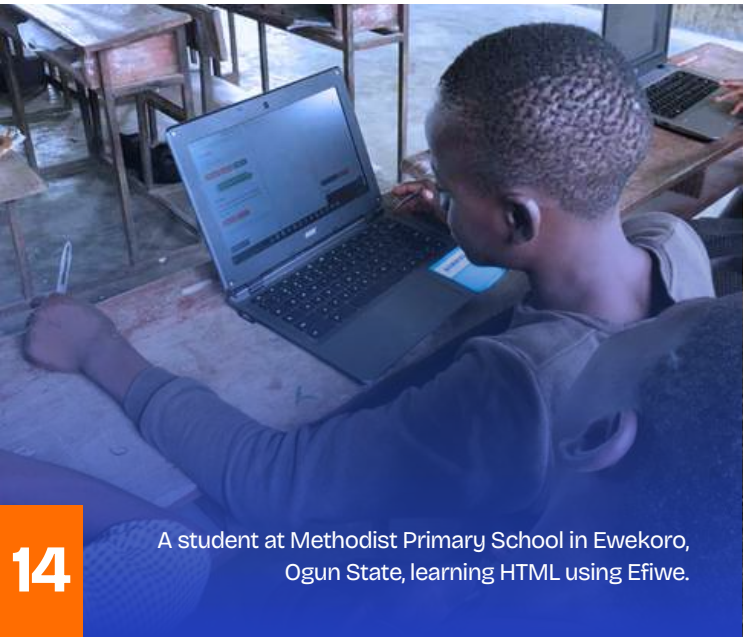


A Teach for Nigeria Fellow with her student at Itamapako High School in Ijebu-Ode, Ogun State.

skills. Another student, Goodnews, who has access to a phone at home, has also shown encouraging commitment to the program. Together, these two have become examples of what determination and curiosity can achieve when given the right opportunity.

Victoria's persistence reinforced an important lesson for me: impact isn't always found where you expect it. Sometimes the students with the fewest resources show the greatest hunger to learn. Her commitment inspires me to keep creating opportunities for young people to access digital skills, regardless of their circumstances.

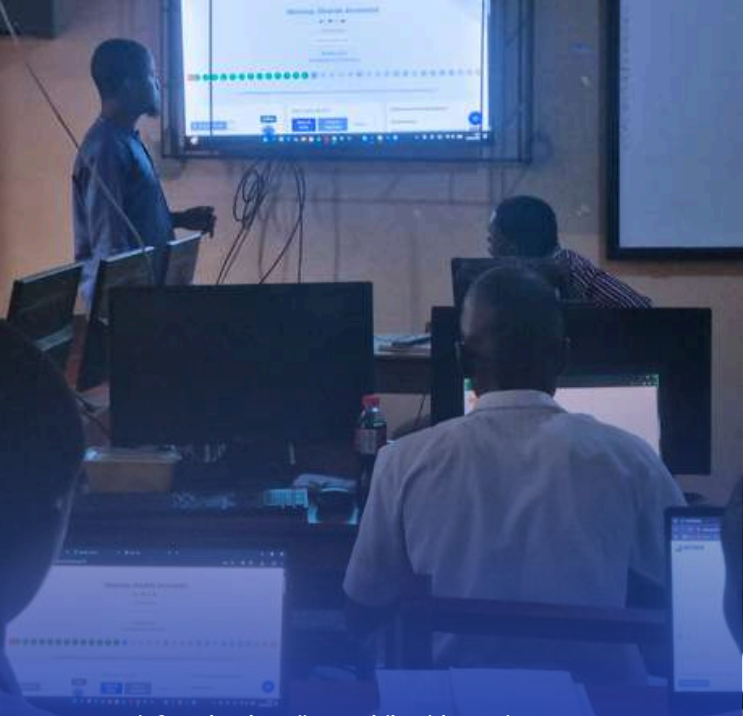
This experience has strengthened my belief that when educators stay consistent and refuse to give up, they can help unlock the hidden potential within their students, and open doors to opportunities that might otherwise seem out of reach.



A student at Methodist Primary School in Ewekoro, Ogun State, learning HTML using Efiwe.

STUDENT AT METHODIST PRIMARY SCHOOL

Before the Efiwe coding classes, I thought computers were only for playing games and watching videos. Now I've learned that computers can be used to create things and solve problems. I was scared at first because coding looked difficult, but now I'm excited whenever it's time for our coding lessons. I feel more confident, and I want to keep learning because I believe I can become someone who uses technology to help others in the future.



A Teach for Nigeria Fellow guiding his students through HTML challenges on Efiwe.

FELLOW AT AFRICAN CHURCH GRAMMAR SCHOOL

The five students I enrolled in the Efiwe Program have gained valuable knowledge and practical skills through the platform.

From the fundamentals of HTML to the basics of CSS, the structured lessons and hands-on challenges have equipped them with a solid foundation in web development.

One of the most notable outcomes has been the growth in their confidence and problem-solving abilities. Through consistent engagement with the activities and projects, the students have moved beyond theory and begun creating their own web solutions.

A particularly memorable success story is that one of the students independently built a demo website, demonstrating their ability to apply the concepts learned through the program to a real-world project.

Demo Website:
https://lighthearted-cocada-cc738f.netlify.app/

Overall, the Efiwe Program has sparked greater interest in technology among the students, strengthened their digital skills, and inspired them to explore further opportunities in coding and web development.

FELLOW AT IJEBU-ODE MUSLIM COLLEGE

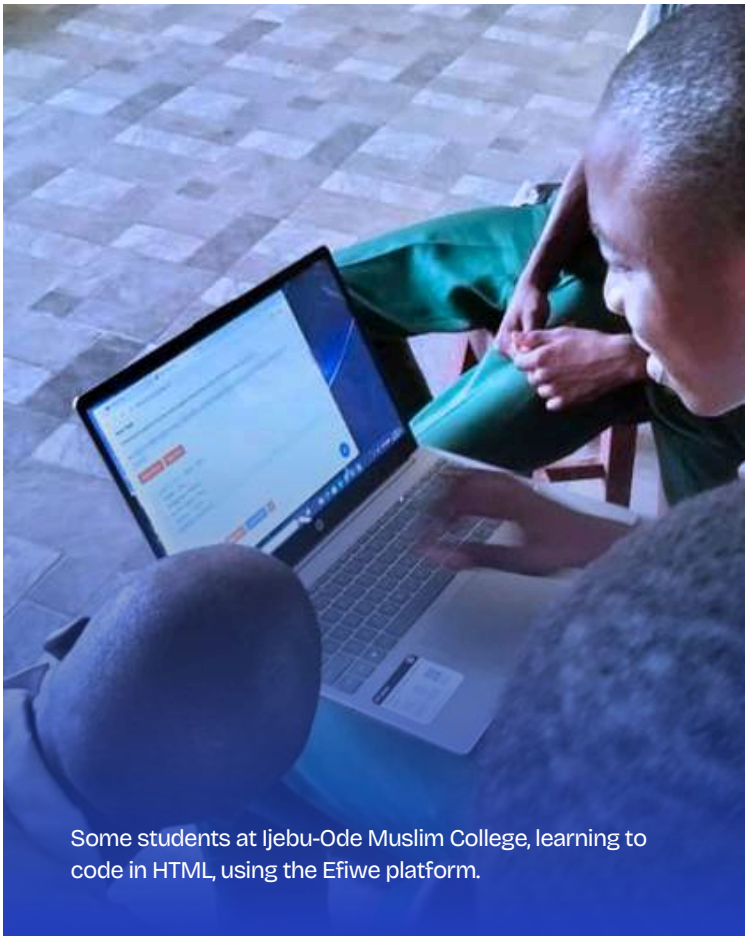
I'm glad to be part of this pilot. At the beginning, it was difficult to launch the Efiwe coding class in my school due to some unpredictable circumstances, but once that window opened, the journey became easier and more accessible.

26 students were onboarded: 24 in Year 11, 1 in Year 9, and 1 in Year 7.

So far, 13 of them have successfully completed all the 191 HTML challenges (including the Year 9 student), with about 5–6 of them ranking in the Top 10 in Nigeria. Most of the others are close to finishing.

Currently, 12 of them are proceeded to learning CSS, and are performing excellently in CSS as well.

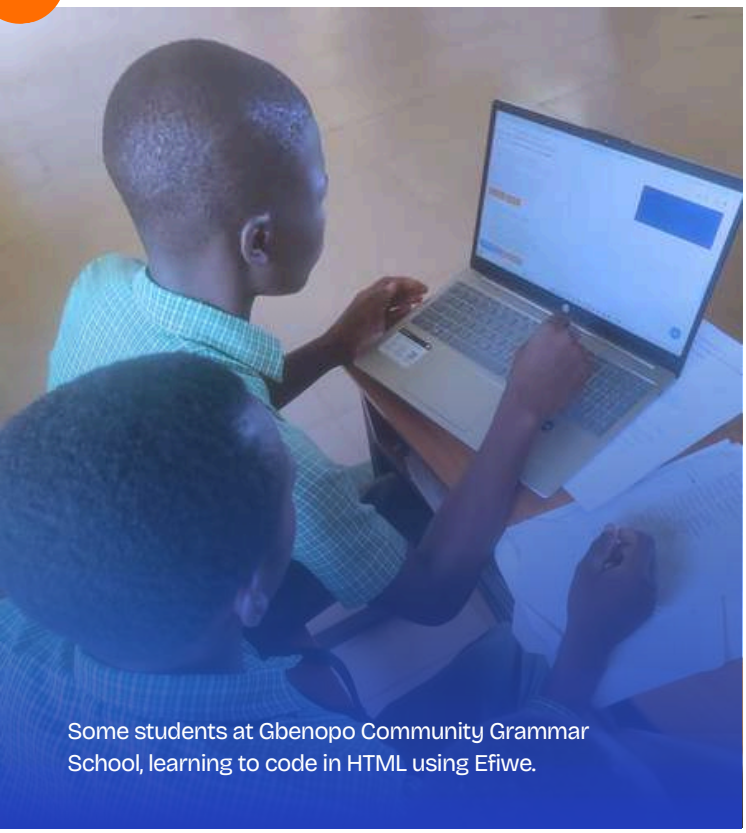
I'm glad to see the transformation and confidence that the Efiwe training has brought to this set of students, and I know they are going places.



Some students at Ijebu-Ode Muslim College, learning to code in HTML, using the Efiwe platform.

FELLOW AT WESLEY PRIMARY SCHOOL

My students have become more energetic, disciplined, and motivated through the Efiwe Coding Program. They find the lessons easy to understand, and the point-based reward system keeps them engaged and excited to learn. It's been inspiring to see their confidence and coding skills grow, making technology learning both enjoyable and impactful.



Some students at Gbenopo Community Grammar School, learning to code in HTML using Efiwe.

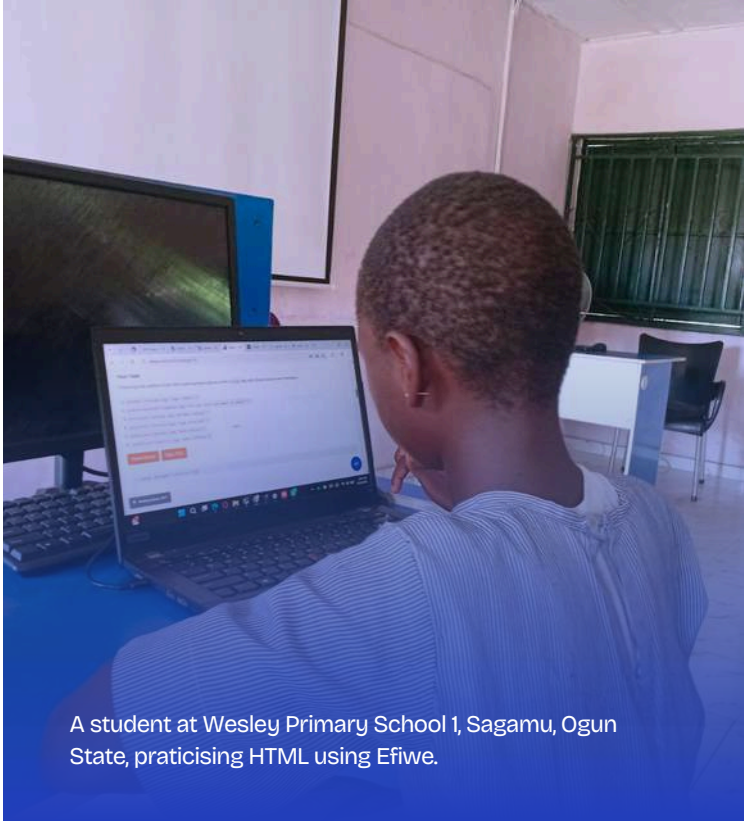
STUDENT AT GBENOPO COMMUNITY GRAMMAR SCHOOL

Participating in the Efiwe coding pilot has been an amazing journey. It has helped me build a strong and practical foundation in web development.

Right from the start, the feature that completely caught my attention was the live leaderboard.

Seeing other students at the top doesn't discourage me, instead, it motivates me. It awakens my competitive spirit and gives me something to work toward. Every time I look at the leaderboard, I feel challenged to complete more levels, improve my skills, and keep climbing.

This gamified approach has made coding exciting. It motivates me to log in every day, take on new



A student at Wesley Primary School 1, Sagamu, Ogun State, praticising HTML using Efiwe.

challenges, and keep pushing beyond my limits.

For me, learning to code is no longer just another lesson in school. It has become an exciting journey where every challenge completed feels like a new achievement.

STUDENT AT LAGOS CITY COLLEGE

When I first joined the Efiwe coding class, I thought coding was only for people who already knew computers very well. I did not think I would understand it.



Some students at Lagos City College in Yaba, learning to code in HTML using the Efiwe platform.

As we continued learning and using Efiwe, I started trying things myself instead of waiting for someone to show me everything. The first time I saw something I created appear on the screen, I was happy because I did not know I could do it.

Now, I am more interested in technology and I want to keep learning.

I enjoyed the classes because we were allowed to learn, ask questions, and try again when we made mistakes.

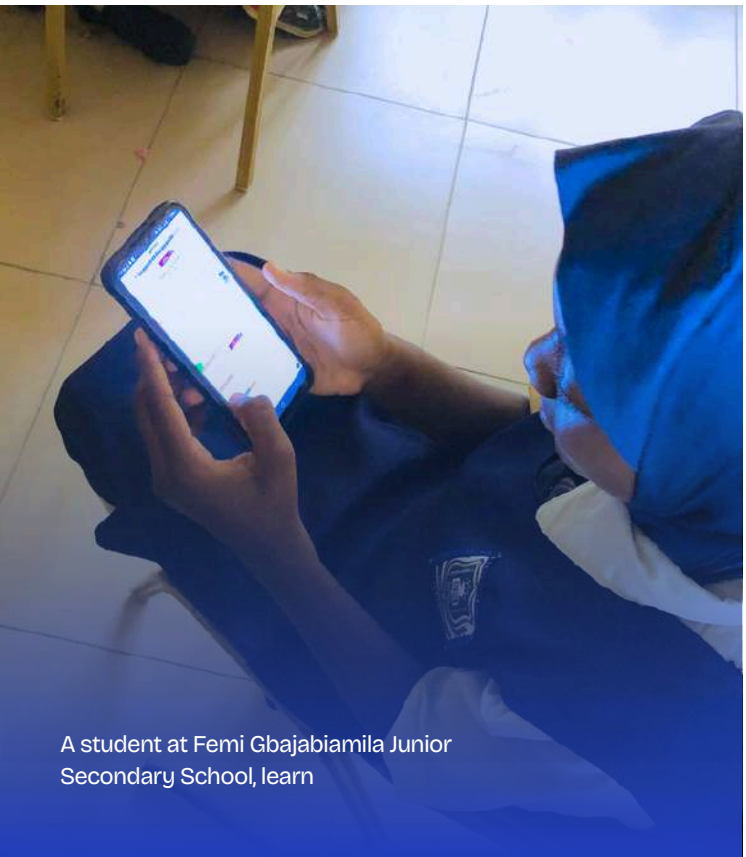
STUDENT AT FEMI GBAJABIAMILA JUNIOR SECONDARY SCHOOL

When I first joined the Efiwe coding class, I thought it would be easy because I had learned some coding before. However, I quickly realized that this experience was different.

As we continued learning and building projects, I was able to create something on my own. Seeing what I had built gave me confidence and made me realize it was the beginning of a new learning journey.

Now, I have developed a greater interest in technology and web design, and I look forward to learning even more.

I enjoyed the classes because I was able to build projects by myself, learn through practice, and have fun while creating something meaningful.



A student at Femi Gbajabiamila Junior Secondary School, learn

COMPARING INDIA AND NIGERIA: WHAT THE TWO PILOTS TELL US

The Uttarakhand pilot and the Lagos/Ogun State pilot share more than geography can obscure.

Both ran in school contexts with limited infrastructure. Both served students who had never previously encountered structured coding education. Both demonstrated that learners without laptops, expensive bootcamps, or English-language instruction as their default mode, could engage meaningfully with the platform.

But there are meaningful differences that the evidence illuminates.

The Uttarakhand pilot ran in schools where device access was structured and managed as part of the program. The Nigerian pilot ran in schools where Fellows had to rely almost entirely on students' personal devices or their own devices, which meant the pilot's reach was bounded by personal phone ownership rates among the student population.

In Uttarakhand, the focus group of learners who completed the full HTML course gave a 100% recommendation rate and showed remarkable completion data.

In the Nigerian pilot, the data from Fellows tells a different story: completion at the learner level was not the primary metric tracked, partly because the Fellows were themselves still mid-journey, and partly because student access fragmentation made cohort-level completion metrics difficult to measure cleanly.

The strongest signal that cuts across both contexts is the Fellows themselves. In Uttarakhand, it was the facilitating educators and NGO staff. In Nigeria, it is the Teach for Nigeria Fellows.

In both cases, the people who ran the program became genuine advocates for it, and that advocacy is the mechanism through which the platform reaches students who would never find it independently.

FELLOWS ON EFIWE: THEIR OWN WORDS

"One learner who had no coding experience at the beginning of the pilot is now confidently completing coding challenges independently on Efiwe. Seeing the learner progress from needing constant guidance to solving tasks with little support showed me that the platform can help students build real coding skills."

"A particularly memorable success story is that one of the students successfully built a demo website independently, demonstrating their ability to apply the concepts learned through the program in a real-world project."

At the beginning, only 2 out of the 10 students could explain basic programming concepts. By the end of the pilot, all 10 students could independently write simple programs, debug common errors, and complete weekly coding tasks with minimal support. Attendance averaged 95%, and 8 students voluntarily stayed after class for extra practice. Three students also began mentoring their peers during sessions."

"Students seeing learning to code as not just another lesson in school. It has become an exciting journey where every challenge completed feels like a new achievement."

ABOUT EFIWE AND TEACH FOR NIGERIA

Efiwe is a mobile-first, AI-powered coding education platform built for the billions of people who learn on smartphones rather than laptops. It works offline after a single setup, supports 246 languages including sign language, and offers coding programs, each delivered through practical, AI-validated coding challenges. It is free to use. It requires no computer lab. It requires no data bundle after initial load.

Teach For Nigeria (TFN) places exceptional university graduates in under-resourced classrooms across Nigeria, training them as educators and community leaders committed to educational equity. The TFN network provides Efiwe with direct access to classrooms across Lagos and Ogun state, and Fellows who are genuinely motivated to build digital skills, both for themselves and for their students.

The partnership is built on evidence.
This report is part of that commitment.

