EFIWE
Master Future Skills. Even Offline.

Future Skills Program Report

IMPLEMENTING PARTNERS:

Subhash Chandra Bose Academy

Kalpavriksha Sustainable Development Society

PM SHRI Kendriya Vidyalaya OLF

Rajhans Public School

LOCATION:

Uttarakhand, India

DURATION:

Sept - Nov 2025

efiwe.com

WELCOME!

When we started building Efiwe, we had a simple but ambitious goal: to prove that anyone, anywhere, could learn to code regardless of whether they had an expensive laptop, a stable internet connection, or even fluency in English. We believed that the barriers keeping billions of people out of tech education weren't about ability or intelligence. They were about access.

We partnered with a number of schools and NGOs in Uttarakhand to test out our platform. **It was a test of that belief.**

What happened over those couple of months exceeded our expectations in ways we couldn't have predicted. The activation rate showed the learners had genuine interest despite the constraints of school schedules, limited device access, and varying levels of prior exposure to coding, demonstrating the kind of persistence that traditional coding courses struggle to inspire.

But the numbers only tell part of the story. What moved us most were the words of students like Akshat, who said, "The platform made my skills sharper than before and gave me confidence." Or Devaj, who said, "It showed me my current knowledge of tech and coding and made me feel hungry for knowing more."

These aren't just testimonials; they're evidence that when barriers are removed and design learning experiences around proven pedagogical principles, something transformative happens.

We built Efiwe on a foundation of research. Every design choice we made was informed by decades of educational research, and these institutional partnerships allowed us to see those theories come alive in the hands of real students.

The feedback revealed both our successes and our growth opportunities. Students appreciated the leaderboard's motivational power, with many reporting it motivated them "a lot." They valued how the platform worked on their phones without requiring constant internet connectivity, a critical feature for students where device access and connectivity vary widely.

Students gained confidence as they moved from uncertainty to genuine belief in their ability to create websites. And perhaps most tellingly, they wanted more after engaging with our 191 HTML challenges.

ABHINAV NEGI & CHIDI NWAOGU
Founders of Efiwe

Many said they wanted CSS, JavaScript, and Python, which demonstrated that they weren't just completing the HTML challenges; they were beginning their coding journey.

What gives us the most confidence moving forward is the simple fact that students kept showing up. Despite schoolwork pressures, despite limited device access, and despite the learning curve of a completely new skill, they persisted. Vaibhav practiced for seven consecutive days and completed every level in HTML. In Pavani's words, **"Efiwe is the best platform for learning coding."** Anushree told others that "this app makes learning coding very interesting through challenges."

These partnerships represent more than a successful implementation. It represents proof for a vision of education we believe is essential for the future.

Technology careers shouldn't be reserved for those who can afford expensive bootcamps or live in cities with stable infrastructure. Coding skills shouldn't require fluency in English or access to high-speed internet.

We're grateful to the students who participated, to the teachers who supported them, and to everyone who believes that the next generation of builders, creators, and innovators can come from anywhere. This is just the beginning. With every piece of feedback, every completed challenge, every student who gains the confidence to say "I can do this", we get closer to a world where coding education truly belongs to everyone. **Thanks for being part of this journey with us.**

ABHINAV NEGI
Co-founder / CEO of Efiwe

THE STORY

Chidi's Wake-Up Call

Chidi has been coding since he was 13. By 19, he had co-founded a social network that reached over a million users before being acquired. He thought he understood what it meant to democratize technology.

He was wrong.

In 2024, he joined an African-focused, Netherlands-based edtech company as Academy Director. On his first day, the sales team said something that changed everything: "**Tons of young people want to learn to code, but they can't even start because they don't have laptops.**"

He started joining every Google Meet class to see what students were experiencing. What he witnessed broke his heart. Students would join, participate actively, then suddenly vanish. When he followed up, the reality hit hard: they weren't choosing to leave; their internet was so spotty they literally couldn't stay connected long enough to learn.

He pulled up the graduation stats. The numbers were brutal: **80 students enrolled, only 6 graduated**. He called the dropouts to understand why. Over and over, he heard the same things: coding felt boring, overwhelming, and impossible to stick with. Then, as the academy expanded into new countries, another problem surfaced. Most students didn't speak English as their first language, but that's how everything was taught. Watching talented people struggle with the language barrier, not the concepts, was gut-wrenching.

Abhinav's Reality Check

While Chidi watched students drop out across Africa, Abhinav was hearing the same story in remote Himalayan villages in Asia.

Since 2023, through the Kalpavriksha residential coding bootcamps and his MSc research at The University of Edinburgh, he has witnessed an entire generation of learners ready to build their future, yet held back by circumstance, not talent. Students from government schools showed extraordinary creativity and hunger to learn. The spark in their eyes during bootcamps was unmistakable.

But when they returned home, that excitement faded into frustration. The same question haunted him: **"Sir, humare paas na laptop hai, na internet... hum coding kaise seekhein?"** (Sir, we have neither a laptop nor the internet. How do we continue learning?)

He turned to the ASER 2024 report to understand if this was just local or systemic. The findings were startling: 89% of rural Indian teens have a smartphone at home, but only 66% could bring one for learning tasks. Of those who know how to use smartphones, just 57% used them for education. Meanwhile, 76% used them for social media.

The pattern was clear: **access exists, but agency doesn't**. We have hardware in hand, but not habits of learning. This gap is the new digital divide.

The Moment Everything Changed

When Chidi and Abhinav connected and shared their experiences, something clicked. They had witnessed the same crisis from different continents, heard the same frustrations in different languages, and seen the same wasted potential in different contexts.

They both realized they had been part of the problem. Every platform they had built assumed users had fast internet and laptops. They had been designing for themselves, not for the billions they claimed they wanted to help.

The breakthrough came when they reflected on their own journey. They learned to code because they had access to computers, the internet, and formal education. But what about the kid in Lagos or the

student in Uttarakhand who's just as curious but only has a smartphone and spotty internet?

These weren't edge cases. They represented the majority of people who could benefit from coding skills but were systematically excluded.

Why This Matters

On August 16, 2025, Chidi and Abhinav launched Efiwe. **Within two weeks, they had over 2,000 active users from 76 countries**. Someone completed 83 challenges in a single session on their phone. Every person who tried Efiwe completed at least 5 challenges on their first day.

This proves that the barriers to coding education aren't technical — they're assumptions. For too long, the tech industry has talked about democratizing education while building tools that exclude most people who could benefit.

Every time someone learns to code on Efiwe, they're not just gaining a skill; they're joining a global economy that was previously locked away. They're proving that talent is universal, even when opportunity isn't.

Efiwe was built for messages like the one from Merab: "I finally tried Efiwe and for the first time, being someone who doesn't really like coding, I loved it! I could easily go through the process. I started just testing the platform, but ended up loving the learning process."

Our Vision for the Future

Efiwe is building a world where potential isn't limited by country, bank account, or device. Where a teenager in rural Bangladesh has the same access to quality coding education as a student at MIT. Where coding bootcamps can operate in remote villages and refugee

CHIDI NWAOGU
Co-founder / CTO of Efiwe

camps.

This isn't just about teaching code. It's about creating pathways to economic opportunity for people who've been systematically excluded. The next breakthrough in technology might come from someone learning on a smartphone in Lagos, Mumbai, Nairobi, Dhaka, or a remote Himalayan village.

The global coding education market is worth over $20 billion, but **it's missing 40% of aspiring developers**; the ones learning on phones, dealing with unreliable internet, speaking languages other than English. That's millions of minds not yet unlocked.

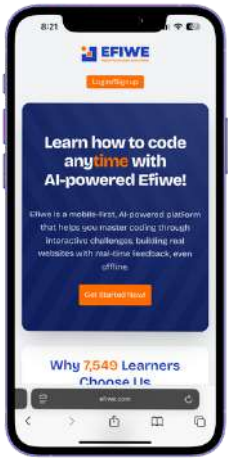
The future of coding education isn't about better computers or faster internet. It's about meeting people where they are, with tools that work in their reality, speaking their language, and respecting their circumstances. It's about turning every phone into a gateway for resilience, creation, and opportunity.

That's the world Efiwe is building, **one learner at a time**.

> We believe that coding education should be **fun**, **accessible**, and **effective**, and that's what Efiwe delivers. With over 189 languages available and a fully offline mode, Efiwe is breaking down barriers and giving people from all backgrounds the chance to learn how to code. Whether one is a complete beginner or an aspiring developer, Efiwe is here to help them grow.

WHAT IS EFIWE?

Efiwe is a mobile-first, AI-powered platform that enables users to learn coding through interactive challenges, guiding them step by step in building a professional website, all from a smartphone. It stands out with its offline capabilities, AI-driven personalized feedback, voice-based learning for low-literacy learners, and availability in 189 languages, making it an accessible and fun coding tool for beginners and educators worldwide.



PERSONALIZED FEEDBACK WITH AI

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

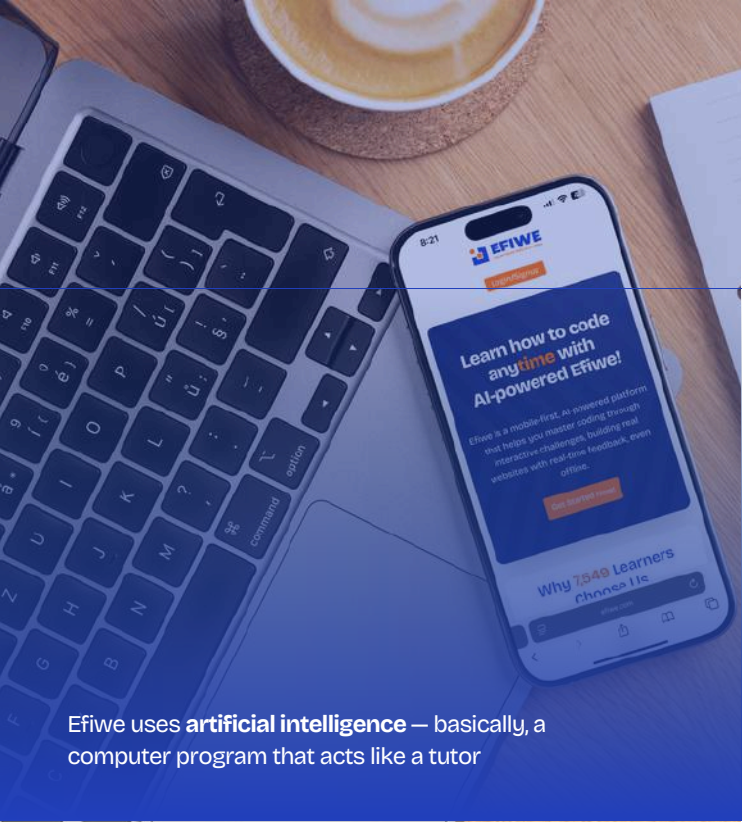
HINT PREDICTION

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



Efiwe uses **artificial intelligence** — basically, a computer program that acts like a tutor

WHY EFIWE'S APPROACH REALLY WORKS

Efiwe uses several teaching methods that scientists have carefully studied and proven to work. This document explains what researchers discovered and why it matters for people learning to code.

1. Learning on a Phone Actually Works

Scientists studied how well people learn when they use their phones instead of computers. They found that when students learn on mobile devices, they do better, with a score showing **they improve by 0.523 points**. This number might sound small, but scientists consider it a real, meaningful improvement.

What this means for Efiwe: One doesn't need an expensive computer to learn coding. Their phone works just as well. Research shows that when learning apps are built specifically for phones, students stay more interested and actually learn more.

This is especially important for people who can't afford laptops. Science proves that learning on phones isn't second-best; it's a good way to learn when the app is designed properly.

2. Making Learning Feel Like a Game Changes Everything

This is where the evidence gets really exciting. Scientists studied over 5,000 students across 49 different experiments. They found that when learning feels like playing a game, students learn much better, with **an improvement score of 0.822**. This is a big deal. It's one of the greatest improvements researchers have seen from any teaching method.

WHY STUDENTS STICK WITH IT

The research found something important about motivation. When learning is gamified, students' **motivation score jumps to 2.206**, and their actual **learning improves by 1.015**. Remember, most people who try to learn coding give up. Making it feel like a game helps people keep going.

PROOF IT WORKS FOR CODING SPECIFICALLY

Scientists looked specifically at teaching programming through games. They confirmed it helps the most with keeping students motivated, then with actually learning the material, and it doesn't make learning feel harder. This is exactly what Efiwe's coding challenges do: keep one interested without overwhelming them.

THE RIGHT WAY TO MAKE IT GAME-LIKE

Not all game elements work the same. Research shows the best results come when they combine three things: game rules (like points and badges), game action (like getting harder challenges as they improve), and game feel (like seeing progress and celebrations). This **combination scored 1.285** in helping people learn. Efiwe includes all three of these elements.

TIME MATTERS

Students who used gamified learning for more than one school term learned significantly more than those who only used it for a few weeks or months. Efiwe is built for long-term learning, not quick lessons, which matches what research says works best.

WORKING OFFLINE HELPS EVEN MORE

Here's a surprise from the research. Students who learned offline did significantly better than those learning online or in mixed settings. This strongly

supports Efiwe's ability to work without the internet. When one can learn without worrying about their connection dropping, they learn better.

3. Getting Personal Help from AI Really Helps

Efiwe uses artificial intelligence (AI) — basically, a computer program that acts like a tutor — to give personal feedback. Research shows this works remarkably well.

REAL IMPROVEMENT IN SKILLS

Scientists tested students who used AI tutors against students who didn't. The students with AI help showed much higher scores in computer thinking skills, confidence in their coding ability, and motivation to keep learning. This means AI tutoring isn't just as good as regular teaching; it can actually be better.

PERSONAL FEEDBACK FOR EVERYONE

One big problem in education is that teachers can't give personal help to every student all the time. Research shows that AI can solve this problem by giving personalized feedback to each student while reducing how much of work teachers need to do. Efiwe's AI does this by looking at a learner's code, figuring out what mistakes they made, and telling them what's most important to fix first, all happening right on their phone instantly.

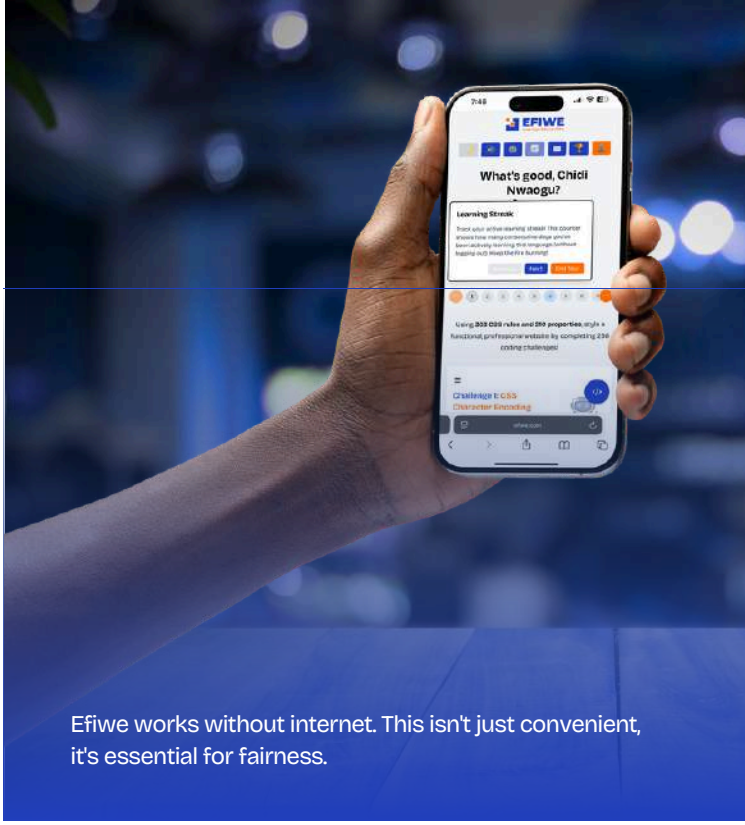
What makes Efiwe's AI special is that it pays attention to their situation. It asks: How long have they been stuck? What mistakes did they make before? What hints did they already get? This kind of smart help is what research says makes AI tutoring work.

FEEDBACK THAT HELPS ONE LEARN

Scientists have known for a long time that giving students feedback while they're learning (not just at the end) helps them learn better. But teachers usually can't do this for every student. Efiwe's AI solves this problem by giving helpful feedback to everyone, every time.

4. Learning in One's Own Language Matters

Efiwe works in 189 languages. While scientists haven't studied many multilingual coding apps yet, they've proven that when students learn in their native



Efiwe works without internet. This isn't just convenient, it's essential for fairness.

language, they understand more, remember more, and finish their courses more often.

Think about it this way: If one's trying to learn something new and difficult (like coding), and they also have to translate everything from another language in their head, their brain is doing two hard jobs at once. Efiwe removes that extra difficulty by letting them learn in whatever language they think in.

5. Building Real Things Helps One Learn

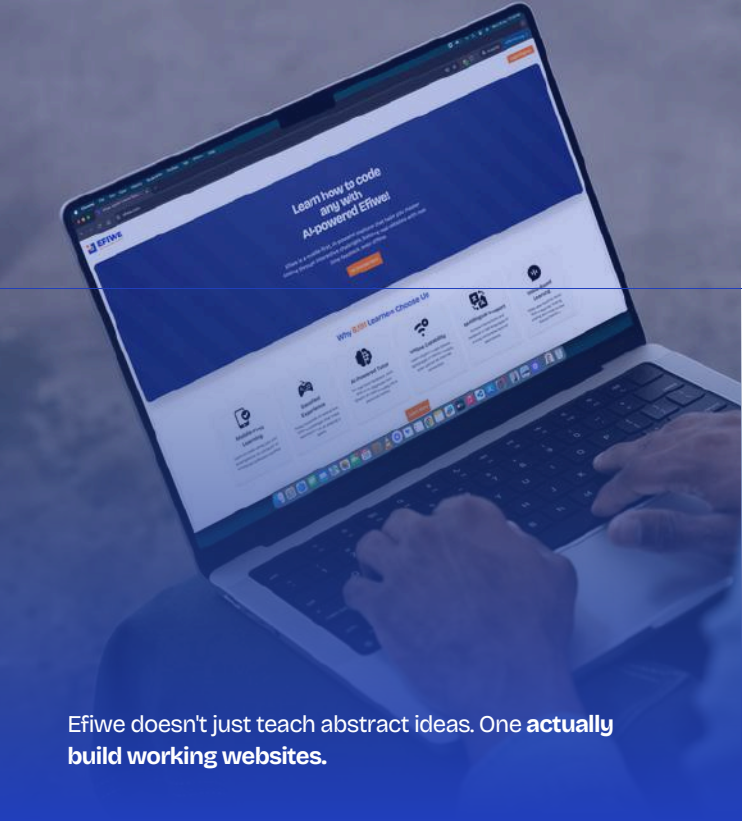
Efiwe doesn't just teach abstract ideas. One actually builds working websites. This approach, called project-based learning, has been studied for decades. Scientists have found that when students make real things, they:

- Understand concepts more deeply
- Stay more motivated because they can see what they're creating
- Build a collection of work to show others
- Use their skills better in real situations later

Efiwe's structure, coding challenges that build up to a complete, professional website, is exactly the kind of step-by-step, goal-focused learning that research confirms works.

6. Working Offline Removes Barriers

Efiwe works without internet. This isn't just convenient, it's essential for fairness. In many places, internet is expensive or keeps cutting out. Apps that require constant internet connection shut out millions of people who want to learn.



Efiwe doesn't just teach abstract ideas. One **actually build working websites.**

The research supports this choice: Students learning offline showed much bigger improvements than those learning online or in mixed ways.

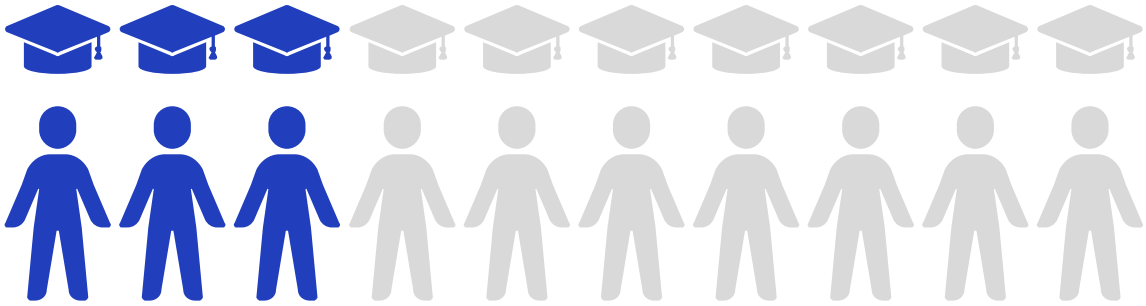
There's another benefit beyond just access. When learning offline, there are fewer distractions. One can practice during their commute, in places without WiFi, or whenever they have time, without worrying about data costs. This helps them build regular practice habits, which is how people get good at coding.

7. Fixing the Dropout Problem

Traditional coding courses have a terrible problem: 70-80% of people who start never finish. Efiwe's early numbers tell a different story: Every single person who tried Efiwe completed at least 5 challenges on their first day. One person even completed 83 challenges in one sitting.

Why? The research explains: When learning feels like a game, it creates an environment where people learn together and feel more internally motivated to keep going. When one feels like they're making progress, when feedback helps instead of making them feel dumb, and when challenges are hard but doable, they keep trying.

BEFORE EFIWE: 70% DROP-OUT



WITH EFIWE: 10% DROP-OUT

KALPAVRIKSHA SUSTAINABLE DEVELOPMENT SOCIETY

39 Registered Learners

Some learners from Kalpavriksha Sustainable Development Society.

Let's walk through what learners from Kalpavriksha Sustainable Development Society told us after they participated in the Efiwe Future Skills Program, and demonstrate how their real experiences match up with what scientists predicted would happen.

STARTING OUT: DID MOBILE LEARNING ACTUALLY WORK?

When we asked them how easy it was to start learning on their phones, 55% gave it a perfect score, 34% rated it very good, and only 11% found it somewhat challenging. On average, people rated the ease of getting started at 4.44 out of 5, which means nearly 90% of the learners found it genuinely easy to begin learning on their mobile devices.

What makes this especially meaningful is that these learners didn't just tolerate learning on their phones; they actually appreciated specific features that made mobile learning work. A learner, Bhoomi, mentioned that the app working offline "felt like a bonus," while another learner, Aaradhana, specifically praised how everything was "available offline." **This directly proves what the research predicted:** when you design a learning app specifically for phones rather than just shrinking down a computer program, people don't see mobile as second-best. They see it as genuinely good.

The research highlighted that mobile learning could produce a measurable improvement score of 0.523, and our learners confirmed this wasn't just theory. The fact that 96% of our learners said Efiwe worked well with their phone and internet situation shows that mobile-first design actually delivers on its promise. People learned real coding skills on devices they already owned, without needing expensive computers.

STAYING INTERESTED: THE GAMIFICATION EFFECT

The research also highlighted that making learning feel like a game could produce one of the greatest improvements scientists have seen from any teaching method, with scores reaching 0.822 for learning and an impressive 2.206 for motivation. Our learners confirmed this wasn't just numbers on paper.

When we asked how engaging they found the learning experience, 44% rated it perfect, and the other 56% rated it very high, averaging 4.44 out of 5. But more importantly, look at what they actually said. A learner, Divyanshu, described feeling "best when the website was being built." Another learner, Anant, explained that he loved how Efiwe "allows us to practice the concept while learning it, so we can immediately apply whatever we have learnt." Jigyasha, another learner, praised how "the challenges are excellent for skill-building."

These comments reveal something crucial: the gamified challenge structure didn't just keep people from getting bored. It created genuine excitement about building something real. The research predicted that combining game rules, game action, and game feel would score 1.285 in helping people learn. Our learners experienced exactly this combination; they earned progress through challenges, faced increasingly difficult tasks, and saw their actual websites taking shape.

Here's the most powerful proof that gamification worked: traditional coding courses lose 70 to 80% of students who start. Every single one of our learners in our focus group not only finished the entire HTML course but also said they would recommend Efiwe to a friend. That's not just good, that's a complete reversal of the dropout problem that has plagued coding

Some learners from Kalpavriksha Sustainable Development Society.

education for years.

THE AI TUTOR: PROMISE AND REALITY

The research on AI tutoring highlighted how personalized feedback could significantly improve thinking skills, confidence, and motivation. Our learners validated this concept.

When we asked about the overall helpfulness of AI feedback like hints, corrections, and guidance, learners averaged 4.22 out of 5. 34% rated it perfect, 44% rated it very helpful, and 22% found it somewhat helpful. Aaradhana captured the core benefit perfectly when she said that "if we face any problem, we don't need to search on other websites; Efiwe itself provides a helping option." Another learner, Prashant, similarly appreciated "the features of where it diagnoses the issues and gives hints to solve the problem."

What does this tell us? The research is right; learners do want and benefit from personalized AI feedback. The concept works. Learners appreciate getting help without leaving the app.

BUILDING CONFIDENCE THROUGH REAL PROJECTS

The research highlighted that project-based learning, actually building real things rather than just learning abstract concepts, helps students understand more deeply, stay motivated, and develop confidence. Our learners strongly confirmed this prediction.

When we asked how confident they felt about building something on their own after completing the challenges, 56% rated themselves perfectly confident, 34% felt very confident, and only 10% felt moderately confident. The average of 4.44 out of 5 means nearly 90% gained genuine confidence in their abilities.

A learner, Arav, explained what made this confidence real: "I mostly liked the preview option for the website I coded because I could easily see how the code functions." This captures the essence of why project-based learning works. When you can immediately see your code working, when you watch a website take shape through your own efforts, you're not just memorizing, you're understanding. Akshara, another learner, described Efiwe as a "simple, student-friendly platform that makes learning smooth and accessible," emphasizing how the structure created "a motivating environment where they feel guided."

The research predicted that building real things would help students use their skills better in real situations later. The fact that our learners are now asking for CSS, JavaScript, and Python courses proves they feel ready to continue building. They didn't just complete HTML challenges; they gained confidence that they can actually create things.

TECHNICAL PERFORMANCE: THE FOUNDATION THAT HOLDS EVERYTHING TOGETHER

Here's where Efiwe truly excelled. When we asked how well the platform worked with users' phones and internet situations, 78% gave it a perfect score, and 22% rated it very good, averaging 4.78 out of 5. This 96% satisfaction rate isn't just good, it's essential for everything else to work.

The research emphasized that offline capability isn't just convenient, it's fundamental for fairness and actually produces better learning results. Bhoomi specifically called offline functionality a "bonus," while Aaradhana appreciated that everything worked very well " offline." The research highlighted that students learning offline showed much bigger improvements than those learning online, and our technical performance numbers suggest we successfully created an environment where learning could happen reliably, anywhere, anytime, even offline.

Think about what this means practically. When users don't have to worry about their internet cutting out, when they can practice during their commute or in places without WiFi, and when they're not stressed about data costs, they can focus entirely on learning. This technical reliability is the invisible foundation that makes every other feature work properly.

WHAT LEARNERS WANT NEXT

Every single learner told us they want to learn more. 78% specifically asked for CSS, which is the logical next step after HTML. 33% wanted JavaScript, 34% wanted Python, and 23% were interested in AI Basics. This pattern reveals something important about the effectiveness of the combined approach.

When Anant requested "CSS, JavaScript, and Python," he wasn't just listing random topics. He was showing that completing HTML made him want to build complete, functional websites. When users ask for the next course, they're proving that the motivation the research predicted would happen, actually happened. They're not burned out or discouraged. They're excited to continue.

Prashant suggested making the "website available in the form of a mobile application by which more and more students would know about it." This suggestion is evidence that learners are invested in the platform. That level of engagement is exactly what the gamification research predicted would happen when learning feels motivating rather than draining.

THE COMPLETE PICTURE: WHAT REALLY WORKED

When you step back and look at all the feedback together, a clear pattern emerges. Efiwe successfully implemented the research-backed methods that scientists predicted would work, and our learners confirmed these predictions through their actual experiences.

- **Mobile learning** worked because we designed specifically for phones rather than treating mobile as an afterthought. Our learners gave this 89% satisfaction and specifically appreciated features like offline capability that made mobile learning genuinely effective.

- **Gamification** worked because we combined challenge-based progression with immediate feedback and visible progress. Our learners stayed 89% engaged throughout all 191 challenges, and most importantly, not a single person in our focus group dropped out. Compare this to traditional courses losing 70 to 80% of students, and you see how dramatically the approach changed outcomes.

- **Offline capability** worked because users could learn reliably without worrying about connectivity. The 96% technical satisfaction proves that when you remove barriers like unstable internet, people can focus on actually learning.

Some learners from Kalpavriksha Sustainable Development Society.

- **Project-based learning** was effective because users built real websites and could see their code in action. They gained 89% confidence in their abilities and immediately wanted to learn more advanced skills to build even better projects.

THE ONE THING THAT MATTERS MOST

If you had to choose one number that proves everything worked, **it would be this:** 100% of our learners said they would recommend Efiwe to a friend. Not most learners. Not even nearly all learners. Every single person.

Think about what that means. These weren't people who barely finished and felt relieved to be done. These were people who completed 191 HTML challenges and immediately asked what they could learn next. They experienced learning that felt engaging rather than exhausting, that built confidence rather than confusion, that worked on their phones without requiring expensive equipment, and that gave them real skills they felt ready to use.

The research predicted that combining mobile learning, gamification, AI tutoring, offline capability, and project-based learning would create something powerful. Our learners confirmed that when you put all these methods together properly, you don't just teach coding, you transform how people experience learning itself. They went from being beginners who'd never coded before to confident learners asking for the next challenge. That transformation is what all the research was really predicting, and that transformation is exactly what happened.

6 of the 10 Winners of the Efiwe Future Skills Program at the Subhash Chandra Bose Academy.

SUBHASH CHANDRA BOSE ACADEMY

483 Registered Learners

The Efiwe Future Skills Program at Subhash Chandra Bose Academy demonstrates strong foundational engagement with the platform. Among the feedback respondents, completion patterns varied widely, ranging from students who went beyond and completed all six HTML levels to those who primarily engaged with and completed the respective levels assigned to their grade.

WHAT STUDENTS FOUND ENJOYABLE

The platform's approach to making coding accessible resonated with many students. Akshat, who completed Level 2 assigned to his grade, described how the experience helped make his “skills more sharpened than before” and gave him the confidence, calling Efiwe, "a great and amazing platform to learn HTML." This sentiment of confidence-building emerged repeatedly across responses.

Vaibhav, one of the students who went beyond and completed all six levels, particularly appreciated how the difficulty progressed. He "really liked Level 6 as it was getting more interesting as the challenge was ending." The escalating complexity kept him engaged throughout the entire journey. Similarly, Ambika found Level 4 most memorable because she “learnt so many things,” which helped her to improve so much, highlighting how the middle levels provided substantial learning opportunities.

The competitive element worked for several students. Pavani noted that "Level 1 was very enjoyable” because it cleared her basics a lot, suggesting that the foundational challenges successfully established core concepts while maintaining engagement. The progression from basics to more complex challenges created a natural learning arc that students could follow.

THE LEADERBOARD'S MOTIVATIONAL IMPACT

When asked whether the leaderboard motivated them to keep learning, responses showed meaningful engagement with the competitive aspect. Among those who paid attention to it, Akshat said it motivated him "a lot," as did Pavani and Pratyush. Aviral explicitly stated, "Yes, it motivated me a lot," indicating that seeing their progress relative to peers provided an additional incentive to continue.

Interestingly, the leaderboard's effectiveness varied. Some students found it highly motivating, while others didn't look at it. This suggests the competitive element works well for achievement-oriented learners but isn't the sole driver of engagement for all personality types.

FLOW STATES AND FOCUS

The challenge design succeeded in creating moments of deep engagement for many students. When asked how often they felt fully focused or "in the flow," Vaibhav rated his experience at the highest level, as did Pratyush and several others. This suggests that the challenge structure, pacing, and difficulty progression successfully created the conditions for immersive learning experiences.

Devaj, who completed Level 4 assigned to his grade, rated his flow experience highly and noted that the platform showed him his current knowledge of tech and coding and made him feel hungry for knowing more. This indicates that the challenges not only engaged students in the moment but also sparked longer-term curiosity about technology.

One of the winners of the Efiwe Future Skills Program receiving her award from the principal.

CLARITY AND COMPREHENSION

Efiwe's instructional design received positive feedback regarding clarity. Many students found the challenges easy to understand and follow. Ambika gave the clarity a perfect rating, as did several others who completed multiple levels. This accessibility helped students progress through challenges without getting stuck on unclear instructions.

BUILDING CONFIDENCE IN WEB DEVELOPMENT

The impact on student confidence was one of the program's clearest successes. Before the challenge, many students rated their confidence in creating webpages quite low. For instance, Pavani's confidence jumped from a three to a five after completing Level 1. She described how the challenge made her "feel more confident towards coding and the tech area."

Similarly, Anushka said, "I used to think I knew a lot of coding, but actually I learned so many new things, and it was really helpful," showing both increased confidence and humility about her learning journey.

INDEPENDENT LEARNING SUCCESS

When asked if Efiwe helped them learn independently without extra tuition or separate classes, the responses were encouraging. Akshat answered "Yes," as did several others, indicating the platform provided meaningful support for self-directed learning. Vaibhav, Pavani, and Pratyush all confirmed that they felt Efiwe enabled independent learning.

Priya emphasized this benefit explicitly, noting that "it is a very good platform to learn coding. You can learn coding with Efiwe instead of going to extra classes." This validation of the platform's ability to replace or supplement traditional instruction suggests it successfully empowers students to take ownership of their learning journey.

CAREER INTEREST AND FUTURE ORIENTATION

The program showed promise in sparking interest in technology careers. When asked if the challenge increased their interest in technology or coding-related careers, Akshat, Pavani, and Pratyush all responded, "Yes, definitely." Ambika shared this enthusiasm, indicating that the hands-on experience with real web development concepts helped her see concrete pathways into technical fields.

Even students who were less certain showed openness. Several responded, "Maybe / I am thinking about it," suggesting the challenge at minimum planted seeds of possibility about technology careers that hadn't been there before.

INTEGRATION INTO SCHOOL LEARNING

Students overwhelmingly believed coding and web creation should become part of regular school learning. Akshat, Pavani, Pratyush, and many others answered "Yes" when asked if this should be integrated into their curriculum. This strong support suggests students recognized the value of these skills beyond just the enjoyment of the challenge itself.

The enthusiasm for continuation was evident in responses about participating in future challenges. When asked about joining CSS and JavaScript challenges, Akshat and others expressed interest, with several noting they'd like to continue building on what they'd learned in HTML.

STUDENT REFLECTIONS ON PERSONAL GROWTH

When asked to describe in one line how the challenge made them feel about their abilities, responses revealed meaningful personal impact. Aviral wrote that "It encourages me to pass over levels and builds curiosity to move on," capturing both the motivational and curiosity-sparking aspects. Vaibhav shared, "I got to know that I can learn coding very easily through Efiwe."

Akshat's reflection was particularly powerful: the challenge helped "make my skills sharper than before and gave me the confidence." Devaj noted, "It showed me my current knowledge of tech and coding and made me feel hungry for knowing more," suggesting

The Principal calling the Top 10 winners up to receive their awards for the Efiwe Future Skills Program.

the challenge helped students calibrate their abilities while inspiring further growth.

Anushka's response showed both learning and self-awareness: "I used to think I knew a lot of coding, but actually I learned so many new things, and it was really helpful." This kind of metacognitive development, recognizing both what you know and what remains to be learned, represents deep educational value.

PEER RECOMMENDATIONS

The willingness to recommend Efiwe to friends and classmates serves as a key indicator of student satisfaction. Pratyush gave the recommendation likelihood a perfect rating, as did several other students. Aviral rated his likelihood highly as well, adding the message, "Take it easy" for other students, a practical advice suggesting the challenges are approachable with the right mindset.

Anushree enthusiastically noted that, "This app makes learning coding very interesting through challenges," while encouraging others to try it. Pawani offered the simple encouragement, "Keep going!!!!" to future participants, reflecting her positive experience despite finding some challenges difficult.

MESSAGES TO FUTURE LEARNERS

Several students who agreed to share their experiences as Efiwe Future Skills Champions offered encouraging words. Pavani said, "Efiwe is the best platform for learning coding. I personally like it a lot, because it is available offline and free of cost. Efiwe makes learning easy and enjoyable. Try it once, and I assure you that you will fall in love with it." Her emphasis on the offline availability highlights an important accessibility feature. Anushka encouraged others by saying, "Go for it. It's a good platform to learn coding, and the streaks, badges, levels, and leaderboard make it even more interesting," identifying specific features she found engaging.

PLATFORM ENJOYMENT RATINGS

When students rated how enjoyable learning through Efiwe was overall, the responses clustered toward the positive end. Akshat, Vaibhav, Pavani, Pratyush, and others all gave the platform a perfect enjoyment rating of five out of five. Some rated it at four or three, indicating solid satisfaction even among those who encountered challenges.

The consistent theme across positive responses was that the platform made learning feel accessible and achievable while maintaining sufficient challenge to keep students engaged. The hands-on, interactive nature of the challenges, requiring students to write actual code rather than just answering multiple-choice questions, created authentic learning experiences that resonated with many participants.

OTHER SCHOOLS

We also successfully ran the Efiwe Future Skills Program in two other schools, **PM SHRI Kendriya Vidyalaya OLF** and **Rajhans Public School**, with **102** and **50** students respectively. We're still in the process of collecting feedback from the participating students.

BOTTOM LINE: EVERYTHING IS BASED ON PROVEN SCIENCE

Efiwe doesn't just use one good teaching idea; it combines several methods that scientists have proven work:

- **Learning on phones** (improvement score: 0.523) makes coding available to billions of people
- **Making it feel like a game** (improvement score: 0.822 overall, 2.206 for motivation) keeps people interested and stops them from quitting
- **AI personal tutors** significantly improve thinking skills, confidence, and motivation
- **Working offline** lets you learn anywhere and actually produces better results
- **Multiple languages** remove the barrier of having to know English
- **Building real websites** teaches practical skills you can actually use

Each of the learning methods we adopted has strong scientific proof that it works. Putting all of them together in one single platform created something powerful: a way to teach coding that removes the main reasons billions of people can't learn:

They can't afford computers
(Solved by phones)

They get bored and quit
(Solved by gamification)

They need individual help
(Solved by AI feedback)

They don't have good internet
(Solved by offline mode)

They don't speak English well
(Solved by multiple languages)

They need to build real skills
(Solved by making actual projects)

THE SCIENCE IS CLEAR:
Efiwe's approach isn't an experiment or guess. It's a careful use of the teaching methods that researchers have proven work best. For people in developing countries, students with limited money, and anyone who's been left out of traditional coding education, Efiwe offers a scientifically proven path to real coding skills.

Frequently Asked Questions
efiwe.com/faqs

Testimonials
efiwe.com/testimonial