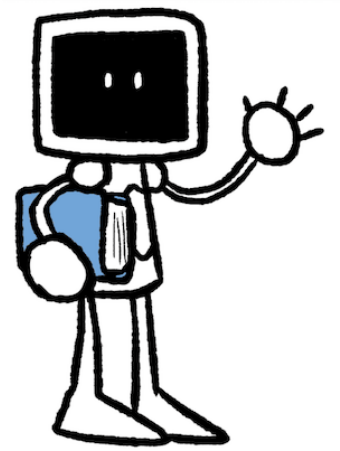
aiphabet

2025
YEAR IN REVIEW



A Message from the Founders

2025 marked a transformative year for Aiphabet. We officially launched our platform and welcomed thousands of learners from over 50 countries, turning our vision to democratize AI education into reality.

Our mission is clear: bridge the knowledge gap and empower teenagers with AI literacy. In an era where AI reshapes every aspect of our lives, every young person deserves the opportunity to understand, engage with, and shape these technologies, regardless of background or location.

This year we launched our certification program, ran successful hands-on bootcamps, and won the prestigious 2023-24 Tools Competition (selected from over 1,900 submissions worldwide).

But our greatest achievement is seeing students realize they can not only understand AI, they can build it, question it, and improve it. That's the future we're building at Aiphabet.

Thank you for supporting our mission. Together, we're ensuring the next generation doesn't just live in an AI-powered world, they actively shape it.

With gratitude,

Ansaf Salleb-Aouissi & Uzay Macar

President & Vice President, Aiphabet

Ansaf Salleb-Aouissi
President

Uzay Macar
Vice-President

Mission and Vision

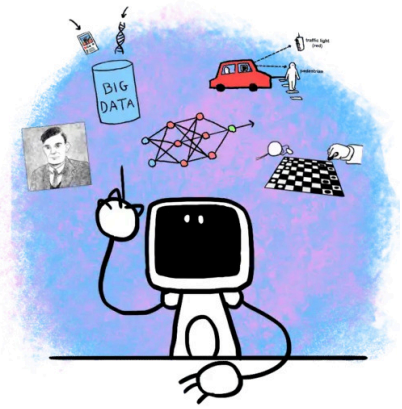
Bridging the knowledge gap and empowering teenagers with AI literacy

Aiphabet is a 501(c)(3) nonprofit dedicated to making comprehensive artificial intelligence education accessible to all young people, everywhere. We provide free, fully online AI courses that combine rigorous academic content with engaging, interactive learning experiences.

The Challenge We're Solving

AI is everywhere, but most students don't get a chance to learn about it in school. Recent studies have found a concerning 'AI Divide': not everyone has equal access to AI tools and education. Depending on where you live, your gender, or your family's economic situation, you might have very different opportunities to learn about AI.

AI literacy is defined as 'a set of competencies that enables individuals to critically evaluate AI technologies; communicate and collaborate effectively with them; and use them as tools online, at home, and in the workplace.' When students develop AI literacy, they don't just become smart consumers of these tools, they become AI creators.



Our Vision

We envision a world where every teenager, regardless of background or location, has the opportunity to understand AI well enough to use it responsibly, make informed decisions about its impact, and contribute to ensuring it benefits everyone.

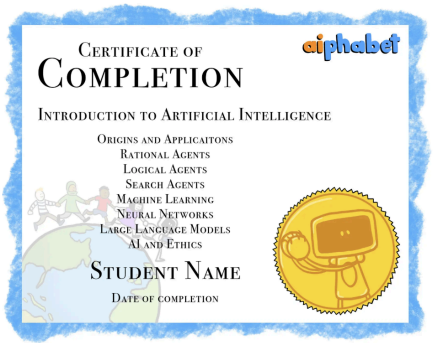
2025 Highlights & Milestones

Platform Launch

In Fall 2024, we officially launched aiphabet.org with comprehensive AI courses designed specifically for middle and high school students. Our platform features interactive lessons, videos, quizzes, and hands-on coding projects, all completely free and accessible worldwide.

Tools Competition Winner

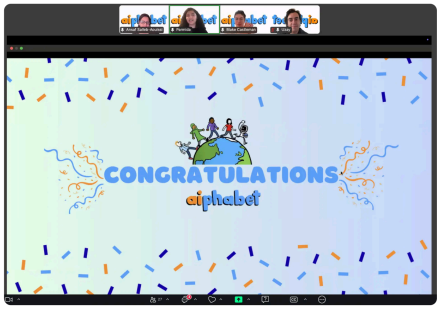
We were selected as a winner of the prestigious 2023-24 Tools Competition, chosen from over 1,900 submissions worldwide. This recognition validates our approach to making AI education engaging, accessible, and grounded in informal learning research.



Certification Program Launch

In March 2025, we launched our certification program, allowing learners to earn official credentials that showcase their AI knowledge and skills. Our first certification covers Introduction to Artificial Intelligence, spanning 8 comprehensive units from AI foundations to ethics.

Summer Bootcamp 2025



We ran a successful two-day online AI bootcamp for approximately 40 high school students from Baccalaureate School for Global Education (BSGE). We covered AI basics through neural networks and ethics using our platform materials in addition to interactive tools like Google Colab, Teachable Machine, and TensorFlow Playground. Students rated the bootcamp excellent across all categories (content, organization, clarity, ease of use), with the majority reporting their understanding of AI topics improved "significantly" or "greatly." All participants received certificates and community service hours.

Student Testimonials

"I learned more information about artificial intelligence and other aspects that I normally would not have learned in regular school."

— BSGE Student

"The breakdown of AI was very clear and concise. I now have a foundational understanding that will help when I delve deeper into it in the future."

— BSGE Student

"Despite knowing very little about AI, I was able to keep up with the content."

— BSGE Student

"The bootcamp was super great! It provided content that is not readily available at my school on its own. It was super informational!"

— BSGE Student

Global Reach & Impact

Since our launch in Fall 2024 through December 2025:

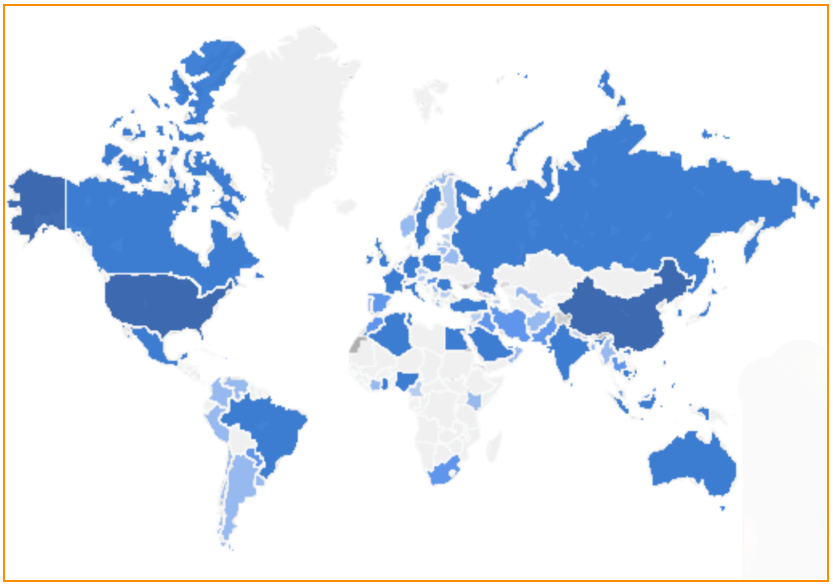
6.2K
Active Users

12K
New Users

50+
Countries

Top Countries by Active Users

Country	Active Users
United States	2,900
Singapore	1,200
China	784
United Kingdom	319
Australia	205
Ghana	195
Canada	187



Aiphabet Brings AI Education to Ghana in Partnership with Child Online Africa

Aiphabet is excited to announce our expanding partnership with Child Online Africa, bringing comprehensive AI literacy education to students across Ghana and other African nations. Launched on International Literacy Day, this initiative is now in its third week, with approximately 500-520 students participating in weekly sessions across selected schools.

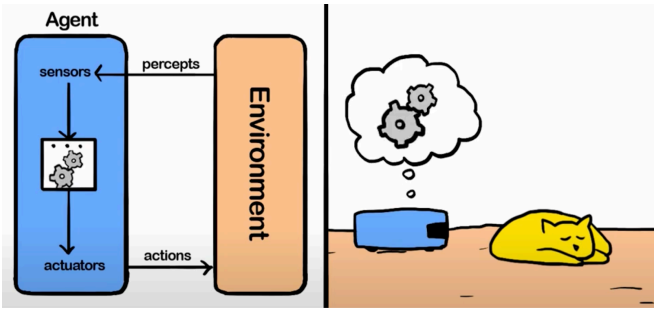
The program delivers Aiphabet's interactive curriculum covering AI fundamentals, ethics, data privacy, and creative applications to learners aged 13-18. Over the eight-week pilot, students will complete four sessions each, representing over 4,000 total learning experiences. Early feedback from educators and students has been enthusiastic, with participants eager to explore how AI works and how to use it responsibly.

Following the successful launch in Ghana, the initiative will expand to Tanzania and Nigeria, with plans to reach additional African countries by 2026. This partnership demonstrates our commitment to making AI education accessible worldwide, particularly in communities that have historically been underserved by technology education. Learn more: here.

Our Platform & Content

Comprehensive AI Curriculum

We have a variety of materials published on our learning platform, including articles, Python notebooks, questions, and videos.
Our platform offers 8 comprehensive units covering the full spectrum of artificial intelligence:



Unit 1: Origins and Applications

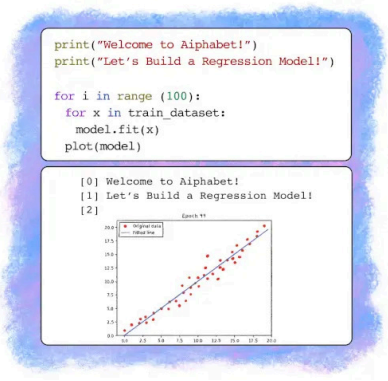
Key definitions, concepts, applications, and the history of AI

Unit 2: Rational Agents

Fundamental intelligent agents and how they make decisions

Unit 3: Logical Agents

Knowledge-based agents for encoding domain-specific knowledge



Unit 4: Search Agents

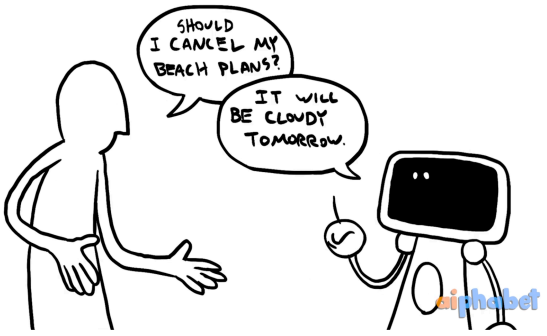
Simple and adversarial search, and search with constraints

Unit 5: Machine Learning

Supervised learning algorithms like decision trees and unsupervised learning like K-means

Unit 6: Neural Networks

How neural networks recognize patterns and make decisions



Unit 7: Large Language Models

Explore LLMs and the code behind technologies like ChatGPT

Unit 8: AI and Ethics

Responsible use of AI, societal impacts, and future potential

Check our materials here: **https://www.aiphabet.org/learn**

What Makes Aiphabet Different

1. Team of Expert Professors

Our curriculum is developed by college professors who are experts in their fields, ensuring academic rigor and accuracy.

2. Comprehensive Curriculum Tailored for Teens

We cover prerequisites including mathematics, statistics, and programming—no background required.

3. Animated and Interactive Content

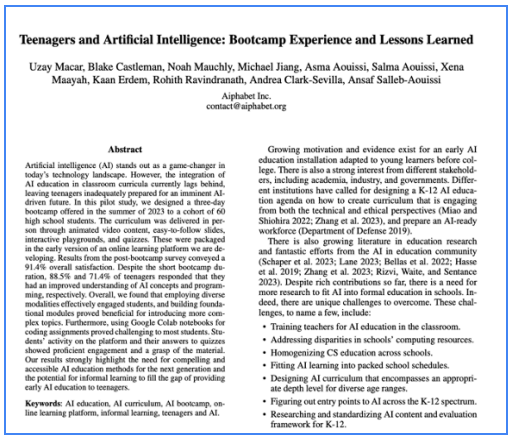
Fun animated videos, interactive playgrounds, hands-on exercises, and real-life applications make learning engaging.

4. Free and Fully Online

Accessible to anyone, anywhere, with an internet connection—completely free of charge.

5. Grounded in Informal Learning Research

Our learning approaches are backed by research in informal learning, maximizing engagement and retention. Our team has published papers* on AI education and is conducting research on informal learning.



Teenagers and Artificial Intelligence: Bootcamp Experience and Lessons Learned

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Abstract

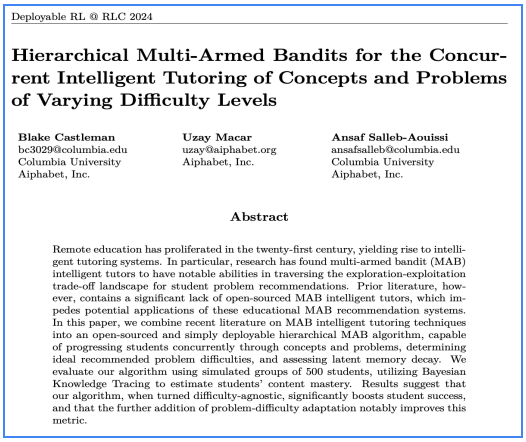
Artificial intelligence (AI) stands out as a game-changer in today's technology landscape. However, the integration of AI education in classroom curricula currently lags behind, leaving teenagers inadequately prepared for an imminent AI-driven future. In this pilot study, we designed a three-day bootcamp offered in the summer of 2023 to a cohort of 60 high school students. The curriculum was delivered in person through animated video content, easy-to-follow slides, interactive playgrounds, and quizzes. These were packaged in the early version of an online learning platform we are developing. Results from the post-bootcamp survey conveyed a 91.4% overall satisfaction. Despite the short bootcamp duration, 88.5% and 71.4% of teenagers responded that they had an improved understanding of AI concepts and programming, respectively. Overall, we found that employing diverse modalities effectively engaged students, and building foundational modules proved beneficial for introducing more complex topics. Furthermore, using Google Colab notebooks for coding assignments proved challenging to most students. Students' activity on the platform and their answers to quizzes showed proficient engagement and a grasp of the material. Our results strongly highlight the need for compelling and accessible AI education methods for the next generation and the potential for informal learning to fill the gap of providing early AI education to teenagers.

Keywords: AI education, AI curriculum, AI bootcamp, online learning platform, informal learning, teenagers and AI.

Growing motivation and evidence exist for an early AI education installation adapted to young learners before college. There is also a strong interest from different stakeholders, including academia, industry, and governments. Different institutions have called for designing a K-12 AI education agenda on how to create curriculum that is engaging from both the technical and ethical perspectives (Miao and Shiohira 2022; Zhang et al. 2023), and prepare an AI-ready workforce (Department of Defense 2019).

There is also growing literature in education research and fantastic efforts from the AI in education community (Schaper et al. 2023; Lane 2023; Bellas et al. 2022; Hasse et al. 2019; Zhang et al. 2023; Rizvi, Waite, and Sentance 2023). Despite rich contributions so far, there is a need for more research to fit AI into formal education in schools. Indeed, there are unique challenges to overcome. These challenges, to name a few, include:

- Training teachers for AI education in the classroom.
- Addressing disparities in schools' computing resources.
- Homogenizing CS education across schools.
- Fitting AI learning into packed school schedules.
- Designing AI curriculum that encompasses an appropriate depth level for diverse age ranges.
- Figuring out entry points to AI across the K-12 spectrum.
- Researching and standardizing AI content and evaluation framework for K-12.



Deployable RL @ RLC 2024

Hierarchical Multi-Armed Bandits for the Concurrent Intelligent Tutoring of Concepts and Problems of Varying Difficulty Levels

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Abstract

Remote education has proliferated in the twenty-first century, yielding rise to intelligent tutoring systems. In particular, research has found multi-armed bandit (MAB) intelligent tutors to have notable abilities in traversing the exploration-exploitation trade-off landscape for student problem recommendations. Prior literature, however, contains a significant lack of open-sourced MAB intelligent tutors, which impedes potential applications of these educational MAB recommendation systems. In this paper, we combine recent literature on MAB intelligent tutoring techniques into an open-sourced and simply deployable hierarchical MAB algorithm, capable of progressing students concurrently through concepts and problems, determining ideal recommended problem difficulties, and assessing latent memory decay. We evaluate our algorithm using simulated groups of 500 students, utilizing Bayesian Knowledge Tracing to estimate students' content mastery. Results suggest that our algorithm, when turned difficulty-agnostic, significantly boosts student success, and that the further addition of problem-difficulty adaptation notably improves this metric.

*Teenagers and Artificial Intelligence: Bootcamp Experience and Lessons Learned. https://arxiv.org/abs/2312.10067

*Hierarchical Multi-Armed Bandits for the Concurrent Intelligent Tutoring of Concepts and Problems of Varying Difficulty Levels" RLC 2024 Workshop on Deployable RL https://openreview.net/forum?id=ag2m818qUm

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Student Ambassadors

We thank our dedicated student ambassadors who champion AI education in their communities and help expand Aiphabet's reach worldwide.

Partners & Supporters

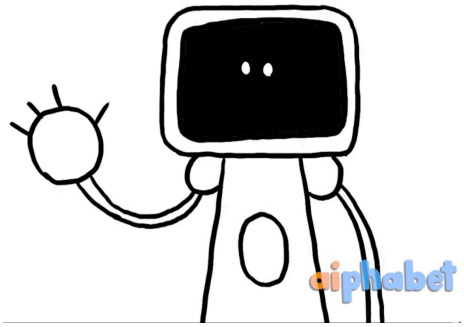
We are grateful for the mentorship, support, and collaboration of our partners:

- Tools Competition
- Teachers College, Columbia University
- Baccalaureate School for Global Education (BSGE)
- Child Online Africa
- Double Discovery Center at Columbia University
- Columbia Global Centers, Tunis
- Cooley LLP
- Score.org

Looking Forward: 2026 & Beyond

As we look to the future, we're committed to expanding our reach and deepening our impact through strategic partnerships and innovative programs.

Key Partnerships Driving Our Growth



We're excited to announce collaborations that will amplify our impact:

- SHAPE (Columbia Engineering): Partnering with Columbia University's high school outreach program to deliver "AI Builders: From Algorithms to Applications," a comprehensive course that transforms students from AI users into AI creators through hands-on coding projects, interactive notebooks, and guest lectures from industry experts.

- Double Discovery Center (DDC) at Columbia University: Collaborating to bring AI literacy programs to underserved youth in New York City, providing hands-on learning experiences and mentorship opportunities that open pathways to STEM careers in their weekend programs.

- Columbia Global Centers: Expanding Aiphabet's reach internationally through Columbia's global network, bringing our AI curriculum to students worldwide and fostering cross-cultural learning experiences in AI education.

- Baccalaureate School for Global Education (BSGE): Developing partnership to deliver AI bootcamps and educational programs to middle and high school students in Queens, NYC, with plans for advisory integration and virtual sessions during school breaks.

- Child Online Africa: Delivering AI literacy education to students across Ghana, Tanzania, and Nigeria, with plans to expand throughout Africa. This partnership brings interactive AI curriculum covering fundamentals, ethics, and applications to over 500 students weekly, demonstrating our commitment to global digital inclusion.

Our Goals for 2026 & Beyond

1. Develop Interactive Sandboxes

Create hands-on sandboxes for AI, mathematics, and programming that allow students to experiment and build intuition through play.

2. Expand Bootcamp Programs

Offer hands-on bootcamps tailored to different K-12 age groups, bringing AI education to life through interactive experiences.

3. Global Dissemination

Partner with schools in the United States and abroad to bring Aiphabet into classrooms, especially in underserved communities.

4. Multi-Language Support

Translate our platform into multiple languages to reach students who would benefit from content in their native language.

5. AI Literacy Blog

Launch an AI literacy blog (AI Digest) for the general public, making complex AI concepts accessible to everyone.

At Aiphabet, we're not just teaching AI; we're building a movement to ensure every young person has the opportunity to understand, engage with, and shape the AI-powered world they'll inherit.

What a fantastic year!

Please share this report widely to help us reach more students and supporters. Thank you for being part of our mission to democratize AI education!

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