Bridging Divides for AI in Education: policy ideas and initiatives

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Outline

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03 Policy Ideas

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Introduction

About TeachAI

TeachAI is an initiative that guides education leaders and policymakers in transforming education by teaching with AI and teaching about AI.

in coordination with the World Economic Forum

Advisory Committee

AASA, The School Superintendents Association
AAAI
Allen Institute for AI
Accenture
ACT
Adobe
AI4ALL
AI4K12
aiEDU
AIforEducation
Amazon
American Federation of Teachers
American Indian Science and Engineering Society
Arab Bureau of Education for Gulf States
ASCD
Associação Nacional de Professores de Informática
Atlassian
Black in AI
Canada Learning Code
The Center for Black Educator Development
Center for Security and Emerging Technology
Central Square Foundation
Chiefs for Change
Cisco
College Board
Common Sense Media
COSSBA
CoSN – Consortium for School Networking
Council of Chief State School Officers
Council of the Great City Schools
Cyber Innovation Center
Data Science 4 Everyone
Dell Technologies
Digital Promise
Education Above All
Education Commission of the States
Education Leaders of Color (EdLoC)
EdTech East Africa
Encode Justice
European EdTech Alliance
Everyday AI
ExcelinEd
EY
Fab, Inc.
German Informatics Society
Getting Smart
GitHub Education
Google
Grok Academy
IndigiGenius
Infosys Foundation USA
InnovateEDU
Institute for Advancing Computing Education
Inter-American Development Bank
Meta
Micro:bit Educational Foundation
Micron Technology
Microsoft
National Association of State Boards of Education
National Council of Teachers of Mathematics
National Council of Teachers of English (NCTE)
NCWIT
National Education Association
National School Boards Association
One Generation – Indigitize
OpenAI
Pearson
Policy Analysis for California Education (PACE)
RobinCode
SETDA
SIIA
Sociedad Científica Informática de España
Sociedade Brasileira de Computação
Southeast Asian Ministers of Education Organization
STEAMLabs Africa
Teach For America
Teach for All
Texas Advanced Computing Center
UNICEF
Wharton Interactive
World Bank

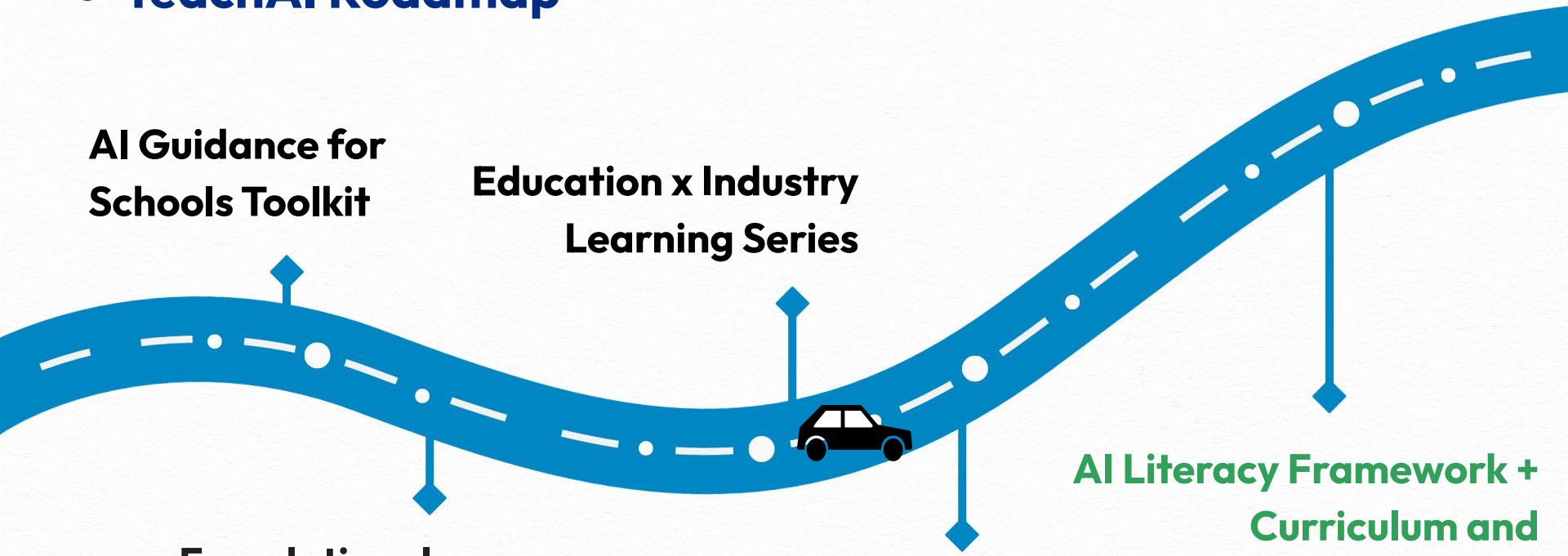
Government Agencies

25+ International Government Agencies

Republic of Bangladesh
Buenos Aires City
Belize
Cambodia
Chile
Colombia
Kosovo
Kyrgyz Republic
Malaysia
Maldives
Malta
Mexico City
Morocco
Nicaragua
Kingdom of Saudi Arabia
South Australia
South Korea
Thailand
Türkiye
United Arab Emirates
United Kingdom
United States
Uruguay
Uzbekistan

plus 40 US State Education Agencies

TeachAI Roadmap



AI Guidance for Schools Toolkit

Education x Industry Learning Series

Foundational Policy Ideas for AI in Education

Guidance on the Future of CS Ed in an Age of AI

AI Literacy Framework + Curriculum and Assessment Exemplars

Teach AI

Supporters

The AI in Education Opportunity

Potential Benefits & Risks of Using AI in Education

Potential Benefits

Content development and differentiation

Assessment design and timely, effective feedback

Tutoring and **personalized** learning assistance

Aiding **creativity** and **collaboration**

Operational and administrative **efficiency**

Misinformation, errors, and academic dishonesty

Diminished student and teacher agency and **accountability**

Compromised student **privacy** and unauthorized data collection

Overreliance and loss of critical thinking

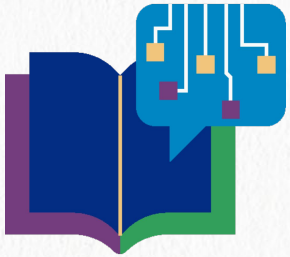
Societal bias and lack of cultural sensitivity

Potential Risks

Teaching With AI and About AI

Teaching With AI

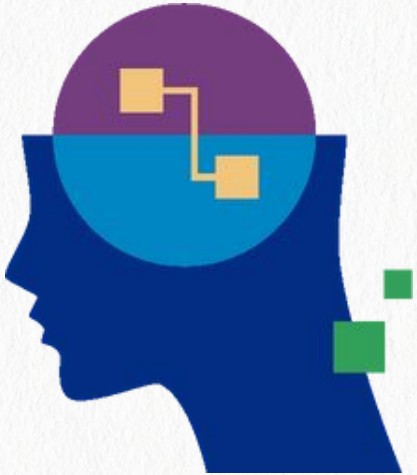
Using AI as a tool for teacher support, student learning, or school management and operations.



Teaching About AI

Understanding how AI works, including studying foundational concepts from computer science, data science, social studies, science, and mathematics.

Take Away 1: Building AI literacy is important to addressing inequities



AI Literacy encompasses:

- Understanding how AI works
- Using AI responsibly
- Recognizing its social and ethical impacts
- Understanding AI's potential benefits and risks and how to mitigate the risks

Digital Divides: Equity

Will AI Widen the Digital Divide?

Old Digital Divide

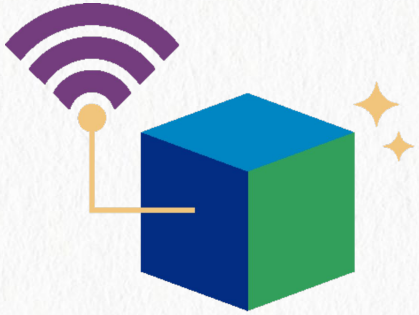
Computers in Schools, High Speed Internet, 1:1 devices...

New Digital Divide

Who is empowered to learn with and about AI

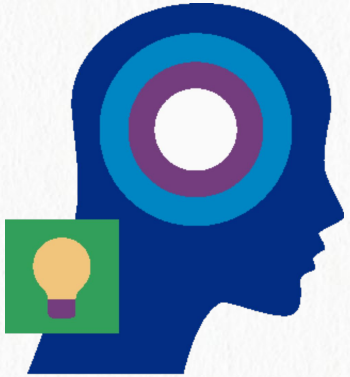
A Potential AI Divide

Reducing a potential AI divide involves addressing barriers to access, supporting effective pedagogical design, and providing powerful learning opportunities.



Access
Devices and Connectivity

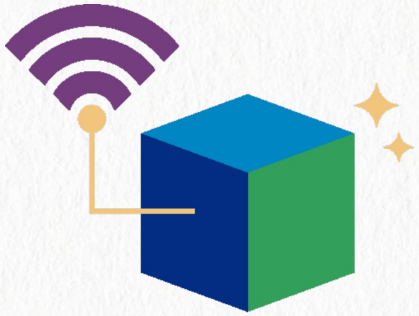
Design
Pedagogical Approach



Use
Active Experiences

Teach AI

Take Away 2: Inequities in AI in education includes access, and also design and use issues. AI Literacy is critical to design and use.



Access
Devices and Connectivity

Design
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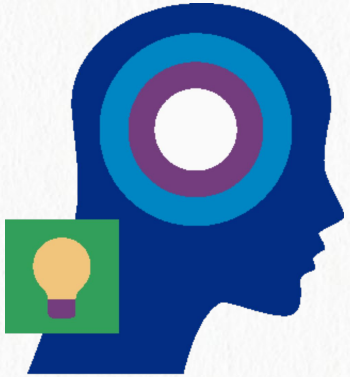

Use
Active Experiences

Bridging divides to equity

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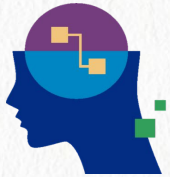
Foundational Policy Ideas for AI in Education

Foster Leadership

Establish an AI task force.

Build Capacity

Provide funding for professional development.



Promote AI Literacy

Integrate AI skills and concepts.

Support Innovation

Promote research and development.

Provide Guidance

Equip schools with guidance on the responsible use of AI.

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Take Away 3: Here are policy ideas to help create the enabling environment for AI in education, especially AI literacy.

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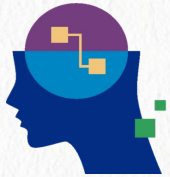

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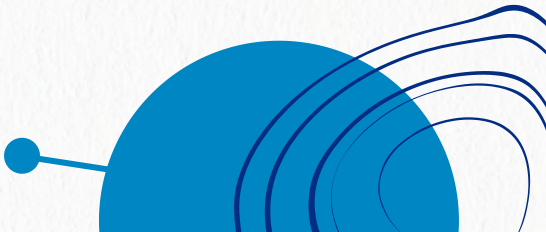
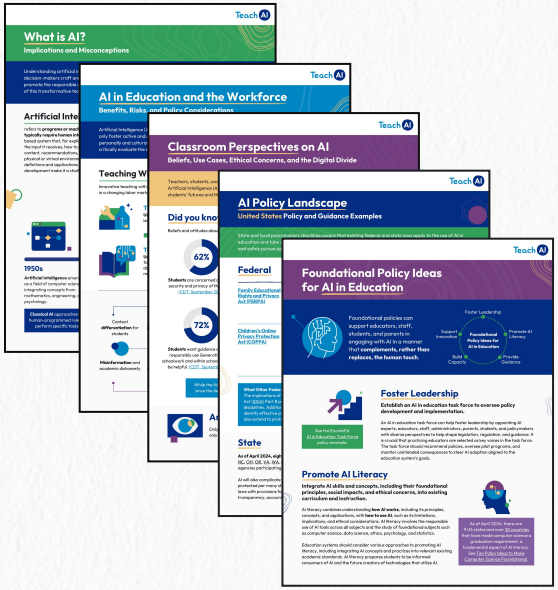


Access the Resources

teachai.org/policy



Initiatives

Take Away 4: Here are examples of programs to help promote AI Literacy, especially the understanding of how AI works.

Indonesia: Prestasi Junior Indonesia

Who: Prestasi Junior Indonesia (PJI) is an Indonesian chapter of Junior Achievement Worldwide, which focuses on preparing young people for employment and entrepreneurship. Since 2011, PJI has created pathways for more than 700,000 young Indonesians to find opportunities in STEM, economics, and more.

What: "A new STEM education program with a focus on AI and Machine Learning" To empower Indonesia's educators and students using specialized AI and Machine Learning curriculum, they have proposed a new AI and Machine Learning education program to corporate donors. The program will use Code.org content and resources, including **how AI works, hands-on activities, and a semester-long AI and Machine Learning course**. After learning AI and Machine Learning, students will participate in AI Hackathons and develop and present AI-driven solutions.

Impact: Reaching out to 100 teachers and 6,000 students in 50 schools in West Java from August 2024 to July 2025

Lessons Learned: By collaborating with a local government and Ministry of Education and teacher ambassadors, the curriculum can be sustainably integrated into schools, as ITC is a mandatory subject for grade 10 in the current curriculum. A strong government partnership will contribute to the mobilization of beneficiaries and sustain the program.

Contact: Utami Anita, Program Manager <utami@prestasijunior.org>; Retna Widiyasrini, Assistant Program Manager <retno@prestasijunior.org>

South Korea: Korea National University of Education (KNUE)

Who: Korea National University of Education (KNUE) is a national university which specializes in pre- and in-service teacher training and educational research, regarded as the top South Korean university in education. The student body consists of about 2,400 undergraduate and 3,300 graduate students.

What: KNUE has the largest Computer Science education department and AI convergence education major in South Korea. They will translate the Code.org's CS Discoveries, including the AI and Machine Learning unit into Korean by the end of 2024. Based on the translated curriculum, KNUE will develop a new teacher training program focused on AI for all teachers regardless of their prior experience in AI.

Impact: Training around 5,000 K-12 teachers (teaching different subjects) based on AI and Digital literacy in South Korea from 2020 to 2027

Lessons Learned: The Ministry of Education, university professors, and current teachers are working together to prepare for AI digital education innovation. In 2025, they plan to realize a classroom revolution by increasing the number of computer education and artificial intelligence-related subjects in elementary schools, middle schools, and high schools, and applying AI digital textbooks.

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Keep In Touch!

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