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# Generative AI in Education in Asia-Pacific Region





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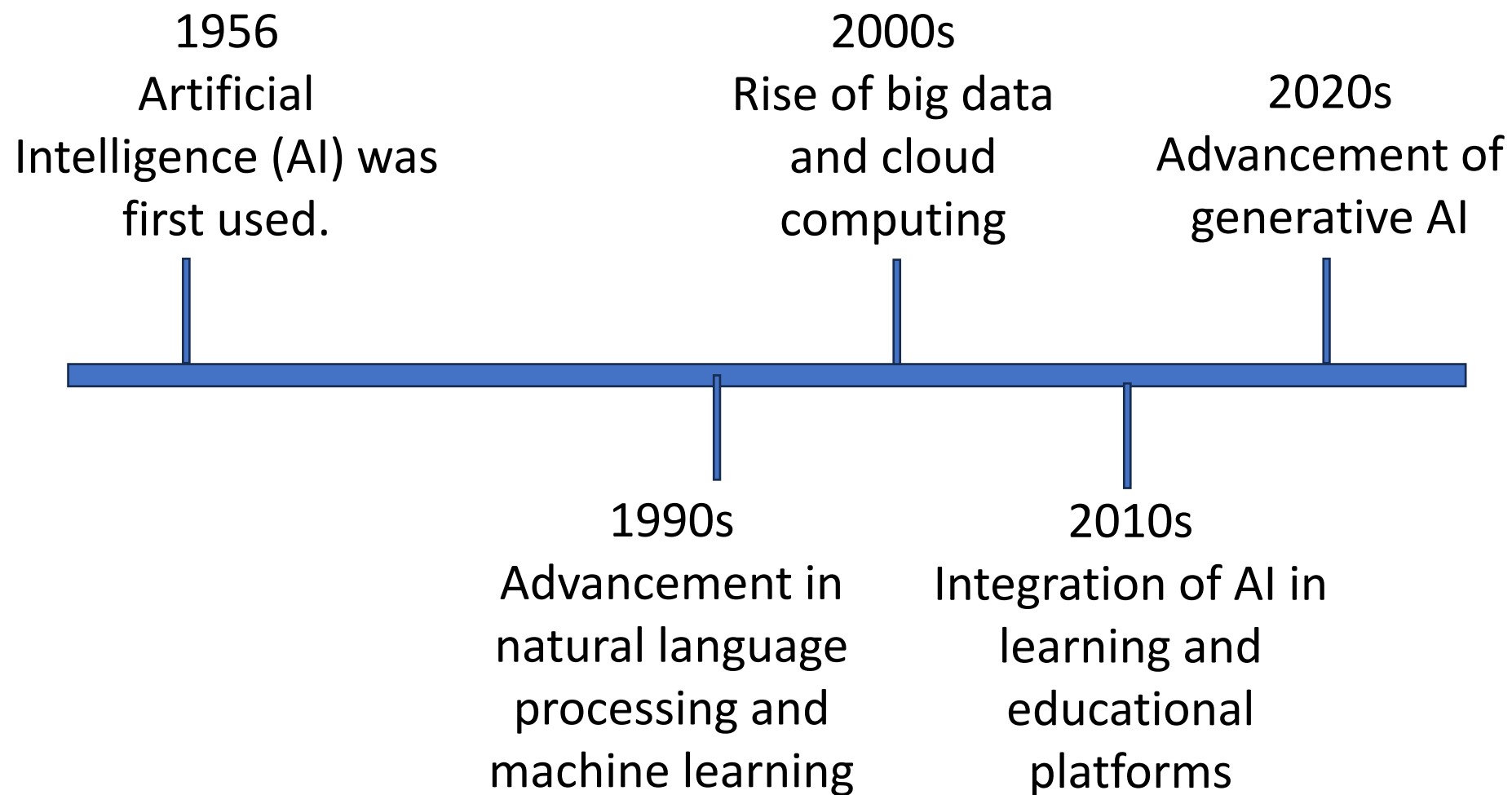
# Generative AI in Education in Asia-Pacific Region

MNCU Network Dialogue  
Live Webinar Series  
8 August 2023

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UNESCO Multisectoral Regional Office in Bangkok

- I. Context of AI in Education and Trends Analysis
- II. Key Messages and Research Findings about AI and Education
- III. UNESCO Contributions in AI and Education
- IV. Country Examples in Asia-Pacific Region
- V. Implications and Recommendations

# I. Background of AI and Trends Analysis



Source: McCarthy et al., 2006;  
Rahman & Watanobe, 2023

## Emerging generative AI examples



Welcome to ChatGPT

ANTHROPIC

**Talk to Claude**

# I. Background of AI and Trends Analysis

Benefits	Risks	Ethical Consideration
<ul style="list-style-type: none"><li>• Personalized responses to complex questions</li><li>• Learning analytics</li><li>• Lesson preparation</li><li>• Instructional support (for learners with disabilities)</li></ul>	<ul style="list-style-type: none"><li>• Data privacy and cybersecurity</li><li>• Misinformation</li><li>• Intellectual Property Infringement</li></ul>	<ul style="list-style-type: none"><li>• Academic integrity</li><li>• Algorithmic biases and injustice</li><li>• Transparency and accountability</li></ul>

Source: Chaudhry et al., 2023; Filgueiras, 2023; Zhu et al., 2023; UNESCO Website

## II. Key Messages and Research Findings about AI and Education

A new UNESCO (2023) global survey of 450 schools and universities found that **fewer than 10%** of schools have formal guidance on AI.

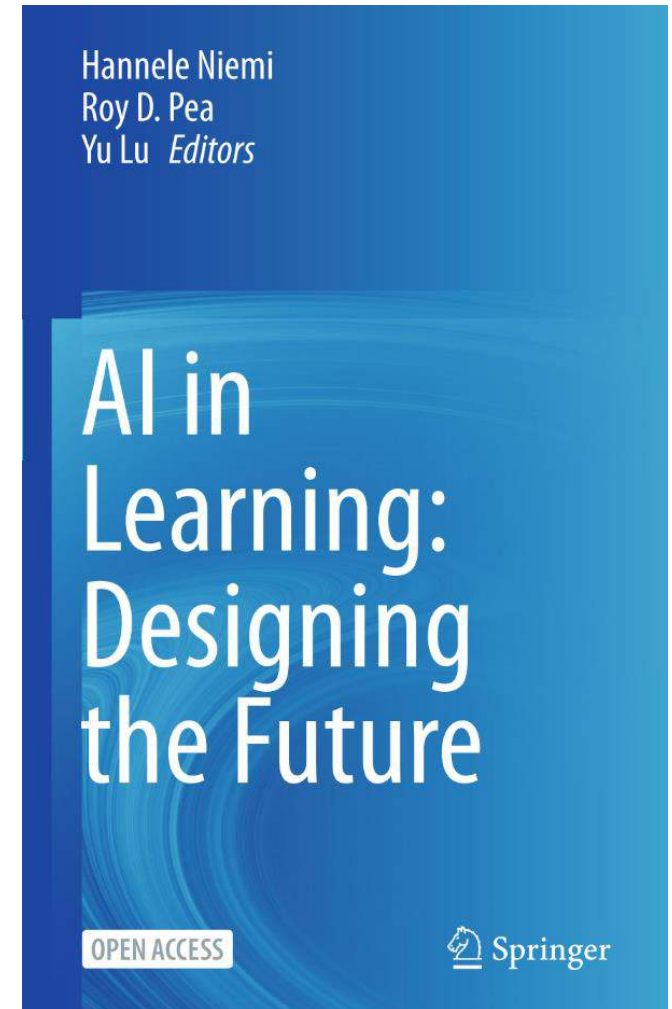


Ground Picture/Shutterstock.com

*Source: UNESCO Website*

## II. Key Messages and Research Findings about AI and Education

- AI is **increasingly integrated into education** and learning processes.
- AI applications are used in **administration, grading, instruction, and personalized tutoring**.
- Technologies like NLP, Speech Recognition, and Image Recognition **enhance** learning experiences.
- **Ethical considerations** are crucial in AI implementation in education.
- **Extensive research is needed** to understand the impact of AI on learning and human lives.



Source: Niemi et al., 2023

# III. Leading Contributions in AI and Education

## UNESCO

- Drafted a [Recommendation on the Ethics of Artificial Intelligence](#) as well as [ChatGPT and Artificial Intelligence in Higher Education Quick Start Guide](#), to mobilize Member States to devise a coordinated approach to handle the challenges brought by AI and ChatGPT.
- UNESCO held the [first global meeting of Ministers of Education](#) (25 May 2023) to discuss opportunities, challenges, and risks of generative AI in education.



### Recommendation on the ethics of artificial intelligence

#### PREAMBLE

The General Conference of the United Nations Educational, Scientific and Cultural Organization (UNESCO), meeting in Paris from 9 to 24 November 2021, at its 41st session,

Recognizing the profound and dynamic positive and negative impacts of artificial intelligence (AI) on societies, environment, ecosystems and human lives, including the human mind, in part because of the new ways in which its use influences human thinking, interaction and decision-making and affects education, human rights and natural sciences, culture, and communication and information,

Recalling that, by the terms of its Constitution, UNESCO seeks to contribute to peace and security by promoting collaboration among nations through education, the sciences, culture, and communication and information, in order to further universal respect for justice, for the rule of law and for the human rights and fundamental freedoms which are affirmed for the peoples of the world,

Convinced that the Recommendation presented here, as a standard-setting instrument developed through a global approach, based on international law, focusing on human dignity and human rights, as well as gender equality, social and economic justice and development, physical and mental well-being, diversity, interconnectedness, inclusiveness, and environmental and ecosystem protection can guide AI technologies in a responsible direction,

Guided by the purposes and principles of the Charter of the United Nations,

Considering that AI technologies can be of great service to humanity and all countries can benefit from them, but also raise fundamental ethical concerns, for instance regarding the biases they can entrench and exacerbate, potentially resulting in discrimination, inequality, digital divides, exclusion and a threat to cultural, social and biological diversity and social or economic stability, the need for transparency and knowability of the workings of algorithms and the data with which they have been trained, and their potential impact on, including but not limited to, human dignity, human rights and fundamental freedoms, gender equality, democracy, social, economic, political and cultural processes, scientific and engineering practices, mental well-being, and the environment and ecosystems,

Also recognizing that AI technologies can deepen existing divides and inequalities in the world, within and between countries, and that justice, trust and fairness must be upheld so that no country and no one should be left behind, either by having less access to AI technologies and enjoying their benefits or in the protection against their negative implications, while recognizing the different cultural perspectives and values of Member States, and respecting the desire of some people not to take part in all technological

Conscious of the fact that all countries are facing an acceleration in the use of AI technologies and AI technologies, as well as an increasing need for them, the digital economy presents important societal, economic and environmental benefits, especially for low- and middle-income countries (LMIC), developed countries (LICs), advanced developing countries (LICs) (ADCs), requiring the recognition, protection and promotion of obligations in order to develop sustainable digital economies,

Further recognizing that AI technologies have the potential to be enablers, and in order for those benefits to be realized, potential for environment and ecosystems should not be ignored but instead addressed,

Aiming that addressing risks and ethical concerns should not hamper the provision of new opportunities and stimulate ethically-conducted research technologies in human rights and fundamental freedoms, values and reflection,



Source: UNESCO Website



# III. Leading Contributions in AI and Education

## *UNESCO Multisectoral Regional Office in Bangkok*

**The overarching purpose** of this Experts Regional Meeting is to inform and guide the

- Responsible integration of generative AI in education, with a focus on ChatGPT and other emerging technologies;
- Implications for utilizing AI competencies in teaching and learning at the school level.



# III. Leading Contributions in AI and Education

## OECD

- The OECD AI Policy Observatory
- The OECD Principles on Artificial Intelligence
- OECD framework for classifying AI systems



Source: OECD Website

## IV. Country Examples in Asia-Pacific Region

### Singapore

- **One of the first countries** in the Asia Pacific region to address AI-related issues.
- In support of **AI for the public good**, opensource AI Verify and launch the AI Verify Foundation.
- The Monetary Authority of Singapore released **whitepapers** that detail the assessment methodologies for **fairness, ethics, accountability, and transparency**

*Source: Singapore Government Website;  
Athena Information Solutions, 2023*

# IV. Country Examples in Asia-Pacific Region

## Thailand

- **The National AI Strategy** was published, outlining a framework to strengthen Thailand's competitive position in AI development
- Guidelines on the **ethics of AI**
- Universities discuss **how to utilize generative AI in teaching and learning**

Empowering Teaching & Learning Experiences

**GENERATIVE AI**  
in Education

Prof. Dr. Jintavee Khaisang  
Department of Educational Technology  
and Communications,  
Faculty of Education, Chulalongkorn University

- Understanding Generative AI
- Enhancing Teaching & Learning Experiences with Generative AI
- Ethical Considerations and Challenges with Generative AI
- Future Directions and Opportunities in Teaching & Learning with Generative AI

Monday, 3<sup>rd</sup> July 2023  
1:00 – 3:00 p.m.

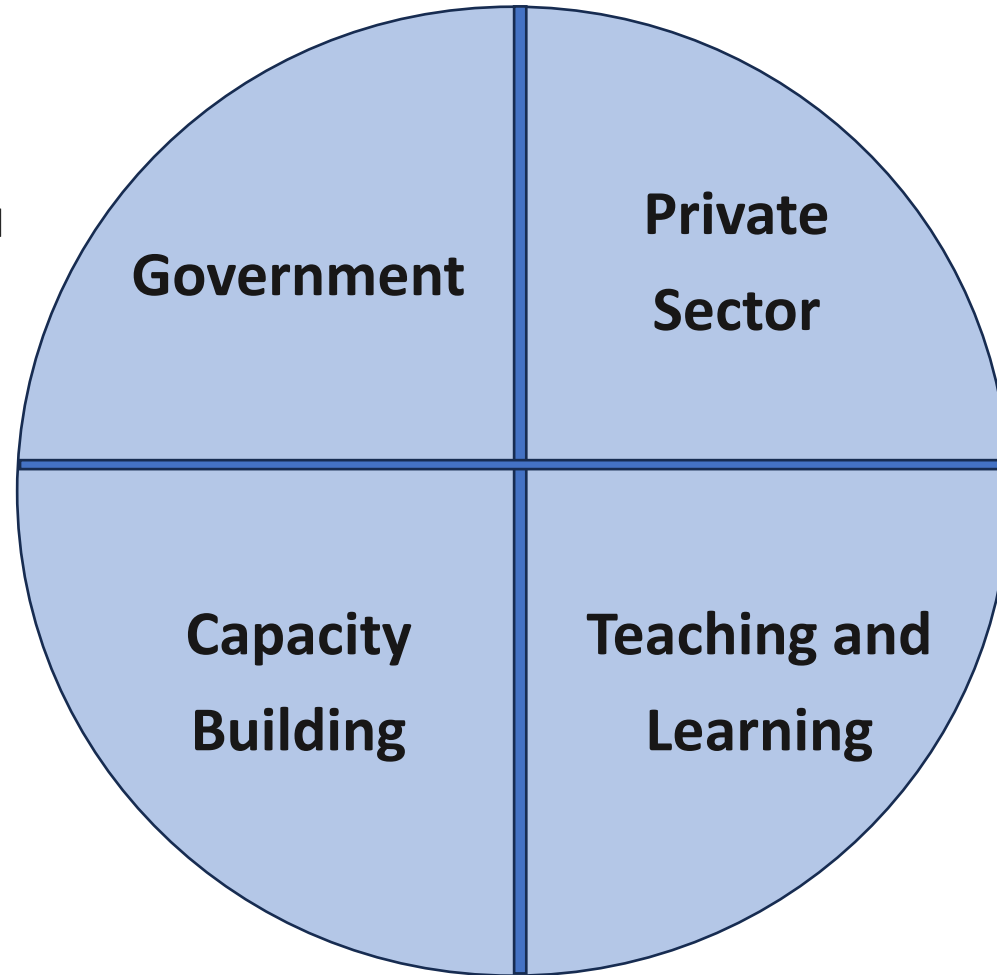
Mahidol University International College

Educational Technology Section and Strategy and Academic Development Group


Source: Thailand Government Website;  
Mahidol University Website

# V. Implications and Recommendations

- Establish guidelines and standards for responsible integration of AI in education as well as promote inclusive and equitable access for all learners.
- Empower teachers with useful skills and competencies to use generative AI in their pedagogical practices, and equip them with useful capabilities to educate learners with 21st-century skills.



- Establish trust with stakeholders by demonstrating the benefits of AI and its alignment with educational goals and values.
- Improve data protection and privacy measures to safeguard people's information.
- Educators and learners should use AI as a supportive tool, not a replacement for human interaction and instruction.

A woman and a young girl are looking at a globe together. The woman is on the left, and the girl is on the right. They are both smiling and looking at the globe with interest. The background is a soft, out-of-focus green, suggesting an outdoor setting. The text is overlaid on the image in a blue font.

“ There is a huge skills gap around AI in Governments and other administrative and security structures that must be addressed at the national and global levels. We must work together for AI that bridges social, digital, and economic divides, not one that pushes us further apart.”

**António Guterres**  
UN Secretary-General



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*Thank you!*



A.I.

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