



An Institute of



# AI & the Humanities in a Future-Ready Education Phase

ISHEL 2025

International Seminar on Humanity, Education, Language

Dr. Mohamed Aidil Subhan

Saturday, 5 July 2025



# Presentation Schedule

1. Introduction
2. SG's Education Phase
3. SG's Ed Tech Journey
4. AI & Educational Transformation in SG
5. Link between AI & the Humanities in SG
6. Conclusion





An Institute of



## Introduction

Today, our children are born digital natives. But we must still give them more deliberate exposure to AI. This will help them better understand the nuances, limitations and abilities of AI tools. Not everyone may have the inclination to go far in this field. But everyone should have the opportunity to develop a basic understanding and proficiency. With this foundation, they will be able to better harness AI's innovative potential, and make it a valuable tool in whatever field they choose to pursue later in life.

Lawrence Wong, Prime Minister of Singapore at the launch of Smart Nation 2.0, 1<sup>st</sup> October 2024

## SG's Education Phase

Phase	Years	Focus	Language Policy Impact
Survival-Driven	1959 - 1978	Access, nation-building	Bilingual policy begins; Malay retained as National Language
Efficiency-Driven	1979 - 1996	Meritocracy, economic growth	English strengthened; Mother Tongue decline, SAP for Mandarin
Ability-Driven	1997 - 2010	Creativity, differentiated paths	More communicative MTL use, identity emphasis
Values-Driven	2011 - 2020	Character, global competencies	Contextualized MTLs; cultural grounding and relevance
Future-Ready	2021 - 2030	AI, digital learning, lifelong	Tech-enhanced, AI-supported MTL learning; lifelong bilingualism

## SG's Ed Tech Journey

Period	Highlights
1997–2002	MP1: foundational ICT (labs, infrastructure)
2003–2008	MP2: integration into learning & curriculum
2009–2014	MP3: edu Lab: self-directed, collaborative learning
2015–2019	MP4: preparing for 21st-century and values education
2020–2023	EdTech Plan: devices rollout, SLS, pandemic response
2024–2030	Masterplan 2030: AI, personalised learning, ecosystem scaling



An Institute of



**AI and the Singapore education landscape** is structured around key domains such as **policy direction, curriculum and pedagogy, teacher enablement, and language learning**, and they are aligned to national strategies like **SkillsFuture, EdTech Masterplan 2030, and Smart Nation**.

# 1. National Policy Direction

## A. Smart Nation & AI Strategy

- **AI Singapore (AISG)** launched in 2017 to boost AI innovation and talent.
- **National AI Strategy 2.0** (launched December 2023): Emphasises education as a key domain for transformation.
- Goal: **Human-centric, responsible AI**, supporting economic competitiveness and social resilience.

## B. EdTech Masterplan 2030 (MOE)

- Vision: **“Technology-transformed learning for a technology-transformed world.”**
- AI is seen as a tool to **personalise learning, enhance assessment, and support educators.**

## 2. AI in Curriculum and Pedagogy

### A. Personalised and Adaptive Learning

- **Student Learning Space (SLS):**
  - Now being enhanced with **AI-powered features:**
    - Adaptive learning paths
    - Auto-feedback tools
    - Learning analytics dashboards
- Future plans include **AI teaching assistants** and **personalised formative assessments.**

### B. Curriculum Inclusion of AI Literacy

- **Computational Thinking and AI** taught at upper primary and secondary levels.
- **AI for Students Programme (AI4S)** by IMDA & MOE:
  - Introduces machine learning concepts and ethical AI.
  - Uses practical platforms like **AI for Kids (AI4K)** and **Machine Learning for Kids.**
- **Polytechnics and IHLs** offer AI modules and diplomas (e.g., Ngee Ann Poly, SUTD, NUS AI Centre).



### 3. AI for Teacher Enablement

- Teachers receive **e-pedagogy training** under the National Digital Literacy Programme (NDLP).
- **AI tools for educators:**
  - Automated marking and grading
  - Smart scheduling and classroom management
  - Predictive analytics for intervention (e.g., identifying at-risk students)
- Teachers are also co-designers of AI-enhanced lessons through platforms like **eduLab+** and **Future-ready educators initiatives**.

## 4. AI and Language Education in Singapore

### A. Language Learning and AI

- AI is being used to enhance **MTL (Malay, Tamil, Mandarin)** and English learning:
  - **Speech-to-text engines** for pronunciation feedback
  - **AI chatbots** for oral practice (conversational Malay, etc.)
  - **Natural language processing (NLP)** tools for grammar and vocabulary support
  - **Auto-translation tools** for bilingual learning
- Platforms: Google AI, Grammarly, Read&Write, and local EdTech startups integrating AI tutors.

### B. Ethics and Cultural Sensitivity

- Singapore's multilingual landscape necessitates **culturally contextualised AI**.
- AI in language learning must respect **code-switching norms, register, and semantic nuance** across languages (especially Malay and Tamil).

## 5. Lifelong Learning and Upskilling

- **SkillsFuture** supports AI literacy for adults via:
  - **AI for Everyone (AI4E)** programme
  - **Coursera and Udemy partnerships** offering AI content to Singaporeans
- Emphasis on **AI fluency across professions**: educators, administrators, engineers, and creatives.

## 6. Challenges and Considerations

Challenge	Response in SG
Equity in access	Personal Learning Devices (PLDs) distributed to all students
Teacher readiness	NDLP and professional AI training courses
Ethics and data privacy	AI Governance Framework; student data protection policies
Over-reliance on automation	Emphasis on human–AI partnership, not replacement

## AI & Educational Transformation in SG

Area	Impact of AI
Learning	Personalised, adaptive pathways; multimodal content delivery
Assessment	Real-time, auto-marked formative feedback
Language	Pronunciation training, translation, intelligent tutors
Teaching	AI-assisted planning, grading, learning analytics



An Institute of



There is a **strong and growing link between AI and the Humanities**, especially within Singapore's **future-ready education phase**. This link is shaped by the **need to humanise technology** and ensure that AI is integrated **ethically, meaningfully, and with cultural sensitivity**. In Singapore's context, where education is **values-driven and multicultural**, the relationship between AI and the Humanities is not only relevant—it's essential.

## Link between AI & the Humanities in SG – Tensions & Balances

Opportunity	Risk/Tension	Role of Humanities
Personalised AI learning	Loss of human touch in education	Reinforce empathy, mentorship
Data-driven decision-making	Bias, stereotyping in algorithms	Teach critical media and AI literacy
Automation of feedback/assessment	Dehumanised learning experience	Reflect on what makes learning meaningful
Global tech exposure	Cultural erosion or homogenisation	Preserve and teach local culture

## Conclusion

In Singapore's future-ready education, **AI and the Humanities are interdependent:**

- AI provides the tools to **scale and personalise** learning.
- The Humanities provide the **soul, ethics, and cultural grounding** to make that learning meaningful.
- Together, they ensure that future generations are not just **digitally literate**, but also **ethically wise, empathetically grounded, and culturally rooted**.



An Institute of



“AI will be a major game changer... But how can I as a government harness AI effectively to transform my processes in government? How can businesses, big and small... make full use of AI to improve their processes... and how can I get every worker to master AI tools... to be more productive. That is what we are obsessed about.”

Prime Minister of Singapore Lawrence Wong at the Q&A segment of the **Summer Davos 2025 WEF Dialogue**, PM Wong emphasized the importance of broad-based AI adoption, not just cutting-edge breakthroughs

THANK YOU

