

1. SDG 4: Quality Education – Ethical and Just Access to AI Learning

Philosophical integration: *Ethics/Justice*

AI-driven education tools may increase inequality if rural or underprivileged students lack access to technology. Ethically, fairness requires equal opportunities for all learners — aligning with *Rukun Negara*'s values of “justice” and “courtesy.”

Case example: Malaysia's *Digital Education Policy (2023)* focuses on digital inclusivity through AI-assisted learning platforms to ensure no student is left behind.

Reflection: Are we teaching students to think critically, or just to follow algorithmic outputs?

SDG link: Target 4.3 (Equal access to affordable education).

2. SDG 9: Industry, Innovation, and Infrastructure – Ethical AI Innovation in Schools

Philosophical integration: *Logic and Ethics*

The *DSTIN Framework* (from your slides) emphasizes sustainable innovation in Malaysia through science and technology

Topic+9+Case+Study+Lecture+Notes

Case example: Implementing AI learning analytics must be guided by logical reasoning (valid evidence) and ethical considerations (privacy and fairness).

Reflection: Policies should be justified logically, not just economically, to avoid exploitative or manipulative technology use in education.

SDG link: Target 9.5 (Enhance scientific research and innovation).

3. SDG 10: Reduced Inequalities – Epistemological Fairness in AI Knowledge Systems

Philosophical integration: *Epistemology (Knowledge and Truth)*

AI models trained on biased datasets can misrepresent truth. In epistemology, *justified true belief* is essential for valid knowledge

6+Epistemologi

Case example: AI grading tools in some universities were found to favor English-native writing styles.

Reflection: Epistemological justice means ensuring diverse, inclusive data so that AI

“knowledge” reflects real human experience — not algorithmic bias.

SDG link: Target 10.2 (Empower and promote inclusion).

4. SDG 3: Good Health and Well-being – Human Flourishing through Balanced Education

Philosophical integration: *Metaphysics (Human Person and Flourishing)*

From the metaphysics lecture: human dignity and spirituality go beyond the physical

5+Metaphysics+%28002%29

Case example: Overreliance on AI tutors may reduce human connection and emotional development in students.

Reflection: True education supports both intellectual and spiritual well-being — machines cannot teach empathy, compassion, or self-awareness.

SDG link: Target 3.4 (Promote mental health and well-being).

5. SDG 16: Peace, Justice, and Strong Institutions – AI Ethics and Human Rights

Philosophical integration: *Ethics & Rukun Negara*

Your slides highlight *freedom and human rights in Malaysia*, showing how ethical boundaries differ across cultures

Topic+9+Case+Study+Lecture+Notes

Case example: If AI systems track student behavior for “performance prediction,” do they violate privacy rights?

Reflection: Education policy must balance technological progress with justice, morality, and respect for individual dignity.

SDG link: Target 16.10 (Ensure public access to information and protect freedoms).

6. SDG 12: Responsible Consumption and Production – Sustainable AI Education Systems

Philosophical integration: *Ethics and Ecology*

Environmental ethics from your notes emphasize sustainability

Topic+9+Case+Study+Lecture+Notes

Case example: AI servers require high energy use; using renewable energy in smart classrooms aligns with both *eco-ethics* and *Sejahtera philosophy* (balance and harmony).

Reflection: Sustainability in AI education should include both digital and environmental responsibility.

SDG link: Target 12.8 (Promote awareness for sustainable lifestyles).

7. SDG 17: Partnerships for the Goals – Unity and Shared Knowledge

Philosophical integration: *Rukun Negara & Unity of Knowledge (Epistemology + Religion + Science)*

Your epistemology slides emphasize the *unity of knowledge* — integrating philosophy, religion, and science

6+Epistemologi

Case example: Collaborative AI education projects between universities, industries, and religious institutions can promote moral AI innovation.

Reflection: We should teach students *how to use AI wisely*, not just *how to train AI efficiently*.

SDG link: Target 17.16 (Enhance global partnerships for sustainable development).

AI fairness and equality of opportunity in education

→ “AI-fairness and equality of opportunity: a case study on educational ...” (PDF) ceur-ws.org

Link: <https://ceur-ws.org/Vol-3808/paper17.pdf> [AI-fairness and equality of opportunity a case study on educational achievement.pdf]

Bias and inequity in AI for diverse student populations

→ “How Harmful Are AI's Biases on Diverse Student Populations?” by Stanford HAI [Stanford HAI](#)

Link: <https://hai.stanford.edu/news/how-harmful-are-ais-biases-on-diverse-student-populations>

AI fostering equity in education

→ “Can AI Foster Equity in Education?” (University of Maryland College of Education) [education.umd.edu](#)

Link: <https://education.umd.edu/news/11-08-24-can-ai-foster-equity-education>

Role of AI in Malaysian higher education curricula

→ “Understanding the role of Artificial Intelligence (AI) in higher education curricula ...” (Springer article) [SpringerLink](#)

Link: <https://link.springer.com/article/10.1007/s10791-025-09567-5>

Digital literacy, misinformation & AI in Malaysia (epistemology)

→ “Survey – AI, Misinformation and Digital Literacy Among Gen Z in Malaysia” [ResearchGate](#)

Link:

https://www.researchgate.net/publication/390426561_Survey_AI_Misinformation_and_Digital_Literacy_Among_Gen_Z_in_Malaysia

Ethical/Inclusive design of AI in education

→ “Ethical Design of AI for Education and Learning Systems” (Malaysia based)

akademisains.gov.my

Link: <https://www.akademisains.gov.my/asmsj/?mdocs-file=8327>

Case study: 5G/AI digital school library in Malaysia

→ “Case Study: Advancing Malaysia’s Digital Education Landscape” (Intel) [Intel](#)

Link:

<https://www.intel.com/content/dam/www/central-libraries/us/en/documents/2024-07/case-study-penang-science-cluster.pdf>