



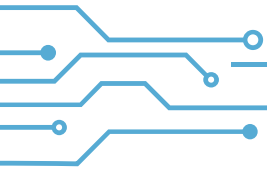
Supplement I

**AI Literacy Learning Framework for
Primary and Secondary Schools**

Prepared by the Curriculum Development Council

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AI Literacy Learning Framework for Primary and Secondary Schools

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I. Introduction

The *AI Literacy Learning Framework for Primary and Secondary Schools* (the Learning Framework) is compiled by the Ad Hoc Committee on Reviewing IT Learning Targets under the Standing Committee on STEAM Education of the Curriculum Development Council. This Learning Framework serves as a reference and a guide for schools in implementing artificial intelligence (AI) education across different Key Learning Areas (KLAs) and subjects, including the use of AI to facilitate learning and teaching. Schools should also make reference to the *Blueprint for Digital Education Development in Primary and Secondary Schools* and the *Guide to Using AI in Teaching in Primary and Secondary Schools* when planning and implementing AI education.

The Learning Framework articulates the rationale and objectives for integrating AI education into the Hong Kong primary and secondary school curriculum. It includes key learning focuses at each key stage, illustrative examples of application scenarios, and recommendations on the assessment of AI literacy.

At the heart of promoting AI education in primary and secondary schools lies the enhancement of students' AI literacy, equipping them to understand the knowledge and principles of AI, and to master technical applications, while upholding proper values and attitudes in a technology-empowered environment. AI education must be student-centred, placing emphasis on strengthening students' thinking and learning capabilities. Through the model of "human-AI collaboration, at the right time and for the right task", the focus is placed on nurturing students' innovative thinking, problem-solving skills and proper values, with the aim of enlightening their minds and enhancing their wisdom so that they can harness technology effectively. Guiding students to use AI responsibly and with critical discernment is the key foundation for nurturing their adaptability and creativity for the future, helping them to seize the opportunities and meet the challenges of the digital era.

II. Rationale and Principles Underlying the Development of the AI Literacy Learning Framework for Primary and Secondary Schools

The Learning Framework adopts the philosophy of “learn to apply, apply to learn, learn to think, think to innovate”, and upholds the principle of “Technology for good”. It enables students to learn through practice, deepen their understanding through application, and internalise their learning through reflection, thereby continuously developing their AI literacy throughout the process, as well as using AI tools effectively, safely and responsibly. The development of the Learning Framework is built upon the following four principles:

- **Progressive development in alignment with students’ cognitive development**

In accordance with students’ cognitive development at different key stages, the Learning Framework adopts a spiral progression design. At the primary level, the emphasis is on developing students’ awareness of AI applications in personal and daily life, and experiencing its basic capabilities and limitations. At the secondary level, the emphasis advances knowing how to select and evaluate various AI tools, and learning to collaborate with AI to develop innovative solutions to problems, achieving “human-AI collaboration, at the right time and for the right task”.

- **Cross-disciplinary collaboration to foster a culture of purposeful AI use**

Given the wide-ranging applications of AI across different subjects, nurturing students’ AI literacy should not be confined to the Information and Communication Technology (ICT) related subjects in Technology Education KLA. The Learning Framework emphasises the organic integration of AI education into learning domains such as languages, humanities, arts, mathematics and science. Through application in cross-disciplinary domains and real-life contexts, students’ understanding of and reflection on AI in more diverse contexts are deepened, along with their ability to transfer and apply knowledge, steadily fostering their adaptability and creative problem-solving abilities for the future.

- **Human-centred approach to cultivating critical thinking**

With an emphasis that AI is designed by humans and serves humans, students should maintain independent thinking and exercise critical discernment when applying AI, while demonstrating empathy and ethical awareness. We should guide students to understand that they themselves are the key agents of knowledge construction and learning, while AI is merely an assistive learning tool. Students should use AI responsibly, developing the capacity to make good use of technology for continuous learning and informed decision-making.

- **Process-oriented approach to drive inquiry and innovation**

In the age of AI, where information can be easily generated, an individual’s capacity for thinking and innovation becomes even more critical. Therefore, the focus of AI education should not rest merely on mastering the operation of tools or producing technological products, but on valuing the learning process of human-AI interaction. While students are grounded in foundational knowledge, we place greater emphasis on nurturing their curiosity to ask “why” and enhancing their intrinsic motivation to learn and their capacity for judgement — these being the keys to enlightening their minds and enhancing their wisdom. Students should be guided to flexibly connect knowledge across different domains, and, through combining hands-on practice and deep thinking, to continuously attempt, refine, and reflect throughout the learning process. This enables students to learn to actively inquire, analyse problems, and put forward novel and valuable insights. In doing so, students not only cultivate a spirit of active learning but also develop their ability to innovate, practise the principle of “Technology for good”, and inject sustained momentum into their future personal development.

III. Learning Objectives for Cultivating AI Literacy in Primary and Secondary Students

At present, there is no universally agreed definition of “AI Literacy” in the international community. However, there is a common consensus that students should acquire knowledge of and the ability to apply AI, be able to make critical and discerning judgement about its benefits and potential risks, and use AI ethically.

With regard to cultivating students’ AI literacy, primary and secondary students must acquire the following knowledge, skills, and attitudes:

- **Understanding the foundational knowledge and concepts of AI:** Being able to master the fundamental principles and operations of AI, to select and apply AI tools according to need, and to analyse and evaluate the content generated by AI;
- **Possessing the problem-solving and innovation capabilities:** Being able to use AI effectively in subject learning and real-life contexts, to solve problems through human-AI collaboration, and to develop innovative thinking;
- **Developing critical thinking and proper values and attitudes:** Being able to understand the moral and ethical implications of AI, including issues such as cyber security, data and privacy protection, and information authenticity, and to practise “Technology for good” by using AI responsibly and making informed decisions.

IV. The Strand of AI Literacy

Students need to learn and master the fundamental operating principles of AI, understand human-AI communication and collaboration, and apply AI technologies with critical discernment.

- **Fundamental operating principles of AI**

Students should understand the fundamental operating principles of AI, including the core concepts such as data, algorithms, and computing power. They should also be able to collect and process multimedia data, and use various types of sensors, as well as acquire knowledge related to topics such as machine learning, deep learning.

- **Human-AI communication and collaboration**

Through human-AI communication, people interact and communicate with AI using natural language, prompts, and coding. AI possesses the ability to recognise and reason, make predictions based on data, and generate text, images, and code, while also automating highly repetitive tasks, thus transforming the landscape of modern industries and the skill requirements for different jobs. In the context of learning and teaching, students therefore need to effectively practice “human-AI collaboration, at the right time and for the right task”, so that AI becomes an assistive learning tool that prepares them for the future. When using AI for learning, students need to build upon human wisdom, emotions, and the proper values. Students must also possess critical thinking, using AI tools responsibly and refraining from placing blind trust in information generated by AI.

- **Reflection on using AI**

AI is not omnipotent and carries with it inherent risks. It lacks moral awareness and genuine emotions; its creativity is constrained by existing data and is prone to data bias caused by deficiencies in training data. Moreover, the rapid development of AI has given rise to enormous demands on energy and resources, and has sparked concerns such as data privacy and security, and intellectual property disputes, and even the unethical use of AI to generate misinformation, presenting significant challenges to the ethical norms and legal frameworks of society. Therefore, students should reflect on the use of AI so that they can use AI and other digital technology tools ethically.

The table below sets out the strands, areas and content of AI literacy:

Strand	Area	Content
Fundamental Operating Principles of AI	Core Concepts of AI	<ul style="list-style-type: none"> • Data • Algorithms • Computing power
	AI Perception	<ul style="list-style-type: none"> • Multimedia data • Sensors
	“Learning” of AI	<ul style="list-style-type: none"> • Machine learning • Deep learning
Human-AI Communication and Collaboration	Human-AI Communication	<ul style="list-style-type: none"> • Prompts • Coding
	AI Capabilities	<ul style="list-style-type: none"> • Recognition • Reasoning • Generation • Prediction • Automation
	Qualities and Capabilities Required for Human-AI Collaboration	<ul style="list-style-type: none"> • Computational thinking • Sense of responsibility • Empathy • Critical thinking • Creativity
Reflection on using AI	Limitations of AI	<ul style="list-style-type: none"> • Bias • Hallucination • Lack of moral awareness • Limited creativity
	Impact of AI on Society	<ul style="list-style-type: none"> • Privacy • Intellectual property rights • Misinformation • Safety and risk • Morals, ethics, and norms • Energy and resource demands • Transformation of industries, education and public services • Human resources and productivity • AI development and national security

Table 1: Strands, areas and content of AI Literacy

V. Implementation of AI Education across Key Learning Areas and in Cross-disciplinary Areas

In learning AI, students acquire foundational AI knowledge and skills through ICT related subjects under the Technology Education KLA, and apply AI in different KLAs and cross-disciplinary areas, such as STEAM education.

AI application scenarios are wide-ranging, covering areas from individual's everyday life experiences and subject learning, to national and social economic development, and even global sustainable development. Through cross-disciplinary learning or project learning, students can deepen their understanding and application of technology in real-life contexts. At the same time, by exploring the impact of technology on society, they can further develop a responsible and ethical attitude towards the use of AI.

The following elaborates on the connection between the learning and application of AI and different KLAs/subjects and cross-disciplinary areas at the primary and secondary levels.

- **Learning AI**

Students acquire the foundational knowledge and fundamental operating principles of AI in ICT related subjects under the Technology Education KLA, so as to develop logical thinking and problem-solving abilities. The Learning Framework arranges core concepts (such as data, algorithms, and computing power) in a spiral progression across different key stages, in order to build a learning foundation of AI literacy.

- **Applying AI**

Within the Science, Mathematics and Technology Education KLAs and STEAM education contexts, students engage in learning activities such as scientific inquiry, mathematical modelling, engineering practice to apply AI knowledge and technology. Combined with data analysis and design thinking, students design and implement innovative solutions to address problems in the real-life contexts.

Students also practise the application and creative use of AI in other KLAs (such as Languages, Humanities, and Arts) and in cross-disciplinary areas, fostering their creativity, problem-solving capabilities, and critical thinking abilities. They also gain an understanding of the ethical, legal, and social implications of AI, and learn to abide by laws and regulations while using AI responsibly and ethically.

VI. Learning Objectives and Key Learning Focuses at Different Key Stages

The Learning Framework incorporates learning objectives and focuses that spiral progressively across different key stages, with specific details to be elaborated in the curriculum documents of individual subjects¹. Schools should follow the recommendations of the Learning Framework for different key stages to nurture students' AI literacy progressively and sequentially. Teachers may also adjust the learning content and design learning and teaching activities based on students' abilities and needs, in order to stimulate their motivation, encourage self-directed learning, and fully embrace the rationale of “learn to apply, apply to learn, learn to think, think to innovate”.

1. Learning Objectives at Each Key Stage

- **At the lower primary level**, the focus is on perception and experience. Students develop an initial awareness of AI and its uses through everyday examples and experiential activities.
- **At the upper primary level**, the focus is on understanding and fostering interest. Students learn about the basic operation of AI and explore foundational applications such as speech recognition and image classification. This enables them to develop computational thinking, and try using AI tools to support their learning and solve simple problems, thus gaining an understanding of the benefits and limitations of AI as well as the norms governing its personal use.
- **At the junior secondary level**, the focus is on understanding and logical construction. Students acquire an understanding of the machine learning workflow, grasp key concepts such as data, algorithms, and computing power, deepen their computational thinking and practise design thinking. Students should progressively develop the ability to evaluate the effectiveness and limitations of AI, and foster critical thinking and a responsible attitude towards its use.
- **At the senior secondary level**, the focus is on application and value innovation. Students deepen their understanding of the core concepts of AI through subject learning and diverse learning experiences, enabling them to navigate daily life in the era of intelligence and recognise opportunities for further studies and future development. Building on this, the curriculum emphasises encouraging students to use relevant tools for innovation and collaboration, to construct AI assistive tools, and to consider ethics and responsibility while understanding the impact of technology on society.

¹ At the time of releasing this Learning Framework, the curriculum documents for all subjects at the primary and secondary levels are currently being reviewed and updated.

2. Key Learning Focuses at Each Key Stage

The learning of AI is grounded in the ICT related subjects at primary and secondary levels, enabling students to acquire foundational knowledge and fundamental principles of AI, and also AI related skills. As for “Applying AI”, its application and human-AI collaboration scenarios can be flexibly integrated into various KLAs and cross-disciplinary areas. This allows students to deepen their learning and practical application in different contexts, as well as address social, moral, and ethical issues related to AI, thus fostering essential competencies, such as critical thinking, problem-solving, innovation, and self-directed learning.

The table on the following page outlines the key focus areas and content related to “Learning AI”, “Applying AI” and “Attitude towards Using AI with Care” across different key stages.

Key Stage and Focus	Learning AI	Applying AI	Attitude towards Using AI with Care
	Ethics and Morality ²		
	Technology Education (ICT related subjects)	Various KLAs and Cross-disciplinary Areas	
Key Stage 1 Contacting and Experiencing with AI	<ul style="list-style-type: none"> ▪ Aware of the applications of AI in everyday life ▪ Develop an initial understanding of computational thinking through “unplugged” activities (e.g. classification, sorting, and finding patterns) ▪ Know that AI can generate text, images, videos, audio and other content <p>[Note: At this key stage, students primarily learn through practical activities. Prolonged use of electronic devices is not recommended. To establish responsible habits in using AI, students should use electronic device under the guidance of teachers or parents/guardians.]</p>		<ul style="list-style-type: none"> ▪ Follow usage rules and establish good and healthy usage habits ▪ Know that AI-generated content may be inaccurate or false, and should not be trusted lightly ▪ Protect personal data (privacy) responsibly, be mindful of the impact on others, and respect copyright

² Morality and ethics (such as empathy, responsibility, integrity), are the core competencies in the age of AI. As AI affects the authenticity of information and societal values, students must develop ethical judgement and critical thinking abilities. This enables them to avoid being misled at the informational level, prevent misuse of technology at the application level, and collaborate with technology thoughtfully and responsibly.

Key Stage and Focus	Learning AI	Applying AI	Attitude towards Using AI with Care
	Ethics and Morality ²		
	Technology Education (ICT related subjects)	Various KLAs and Cross-disciplinary Areas	
Key Stage 2 Interacting with AI	<ul style="list-style-type: none"> ▪ Know about the basic concepts and applications of information processing, such as the “input-process-output” concept, types of multimedia data (e.g. text, images, audio), and ways of collecting and using data in daily life ▪ Know about the computer systems, including basic components such as processors, storage devices, and input/output devices, and understand their relationships with AI systems (e.g. processors and computing power, sensors and data collection) ▪ Understand and apply foundational concepts of computational thinking in order to write programs that handle input and output, and control physical objects ▪ Understand the similarities and differences between AI and human work patterns, recognising that AI is not all-powerful ▪ Understand preliminarily the three key elements affecting performance of AI: Data, algorithms, and computing power 	<p>Various KLAs and cross-disciplinary areas</p> <ul style="list-style-type: none"> ▪ Understand preliminarily the development and applications of AI ▪ Operate AI tools related to learning activities, such as using prompts ▪ Use AI to assist in problem-solving, such as providing feedback on understanding an issue and its solutions, or co-creating innovative ideas to address problems ▪ Evaluate and fact-check AI responses and generated content ▪ Experience and understand both the capabilities (e.g. recognition and generation) and the limitations (e.g. lack of moral awareness) of AI <p>Science, Mathematics and Technology Education KLAs / STEAM education</p> <ul style="list-style-type: none"> ▪ Use coding to control physical objects and interact with the environment ▪ Conduct simple data training 	<ul style="list-style-type: none"> ▪ Identify the authenticity of information (including deepfake and misinformation) ▪ Safeguard personal and others’ data (privacy) ▪ Protect intellectual property rights ▪ Value academic integrity when using AI ▪ Know about the acceptable and unacceptable behaviour when using AI

Key Stage and Focus	Learning AI	Applying AI	Attitude towards Using AI with Care
	Ethics and Morality ²		
	Technology Education (ICT related subjects)	Various KLAs and Cross-disciplinary Areas	
Key Stage 3 Understanding and Making Effective Use of AI	<ul style="list-style-type: none"> Understand further the three key elements affecting the performance of AI, including data, algorithms, and computing power Know about the fundamental hardware of AI systems Understand how AI systems process different types of data (e.g. text, images, and audio) Understand the fundamental principles of “learning” of AI (e.g. machine learning and deep learning) Recognise how natural language processing facilitates human-AI communication Know about the AI applications in ICT field (e.g. image recognition, speech synthesis, vibe coding, and other emerging applications) Know about the biases and their causes (including algorithmic and data bias) Use different data to “train” AI systems, and analyse how these data affect outcomes Solve problems by coding, design and apply algorithms, and integrate with AI to optimise solutions 	<p>Various KLAs and cross-disciplinary areas</p> <ul style="list-style-type: none"> Use AI to assist in data processing Know about the development and applications of AI Use AI tools to facilitate learning Operate AI tools relevant to learning activities, such as planning prompts and refining them through feedback Apply subject-specific AI assistants Analyse and evaluate content generated by AI systems Know about the capabilities of AI (e.g. reasoning, automation, prediction) and its limitations (e.g. bias and hallucination) Know about the applications and impact of AI technology on various aspects of society (e.g. enhancing productivity and impact on human resources) Know about the impact of AI on energy and resource demands Understand the country’s development and achievements in the field of AI <p>Science, Mathematics and Technology Education KLAs / STEAM Education</p> <ul style="list-style-type: none"> Apply AI to assist in scientific inquiry, mathematical modelling, engineering practise, etc. Apply coding and design thinking to develop innovative solutions for use in STEAM education activity scenarios to practice data training, or create AI assistants 	<ul style="list-style-type: none"> Select appropriate AI tools to assist learning, daily life, and creative endeavours Evaluate the safety and risks of AI-generated content Be alert to the impact of unethical and unlawful use of AI on individuals, society, and national security Follow the compliance with laws and regulations in using AI Be aware of the consequences of over-reliance on AI Understand the impact of algorithmic and data bias

Key Stage and Focus	Learning AI	Applying AI	Attitude towards Using AI with Care
	Ethics and Morality ²		
	Technology Education (ICT related subjects)	Various KLAs and Cross-disciplinary Areas	
Key Stage 4 Application and Innovation of AI across Different Fields	<ul style="list-style-type: none"> Understand how AI drives the development of emerging technologies (e.g. the Internet of Things and cloud computing) Know about the advanced concepts of AI (e.g. neural networks, machine learning models, and other related derived concepts) Analyse the types, causes, and strategies for addressing algorithmic bias 	<p>Various KLAs and cross-disciplinary areas</p> <ul style="list-style-type: none"> Use AI to assist in data analysis Use AI for self-directed learning Understand the latest development in AI applications and impact on various aspects of society (e.g. changes in industry, education and public services) Understand and briefly evaluate the benefits and potential risks of AI applications to the society (including national security) Develop innovative AI solution in different fields that contribute to the community <p>Science, Mathematics and Technology Education KLAs / STEAM education</p> <ul style="list-style-type: none"> Apply AI in advanced scientific inquiry, mathematical modelling, engineering practice, or coding tasks for creative problem-solving Conduct data training or create appropriate AI assistants in line with problem-solving tasks in STEAM education 	<ul style="list-style-type: none"> Deepen the concerns from each of the above key stages regarding the responsible use of AI Foster critical thinking and effective use of AI to enhance effectiveness of self-directed learning and creative work Further strengthen human-AI collaboration capacity

VII. Examples of Application Scenarios

Schools should promote AI education through a whole-school and “AI + Curriculum” approach. Through learning within the ICT related subjects under the Technology Education KLA, students should be enabled to master the principles and applications of AI. At the same time, schools should incorporate AI learning elements across other KLAs, in cross-disciplinary areas and in life-wide learning activities, to enrich students’ experiences in learning and applying AI, thus enhancing their AI literacy.

Teachers may refer to the following sample scenarios to design diversified learning activities for the implementation of AI education. More examples are available on the Education Bureau website, which will be updated from time to time as needed.



<https://www.edb.gov.hk/en/DEBP>

Examples of Application Scenarios

Subject	Activity	Content	Key Considerations for Students when Applying AI in Learning
Primary Humanities (Primary 4)	Time Machine	<p>Past and Present of Hong Kong</p> <ul style="list-style-type: none"> Students conduct field visits (e.g. museum visits) and read books and newspapers to gather information about Hong Kong’s social development in the past. They also interview their elderly family members at home to collect relevant oral history materials through their sharing of past daily life. Students use AI tools to generate information about clothing, food, housing, and transportation from the 1960s to 1970s, as well as photos depicting Hong Kong’s past appearance. They then integrate these AI-generated “clues” with findings from field visits and information from books and newspapers, and conduct comparison and analysis to complete a “Time Machine” thematic report. 	<ul style="list-style-type: none"> Fact-checking: Students must be aware that AI tools may generate information that does not align with facts, and should fact-check by using different sources. When the information provided by AI tools differs from the memories of elderly family members or the facts from government websites, students should first fact-check and use accurate information. They should also reflect on the potential factors causing the errors made by AI tools and understand their limitations. Privacy protection: When using AI tools, students should understand that they must never upload personal information about themselves or their family members (e.g. such as real names, addresses, or unedited front-facing photos) to AI platforms, so as to safeguard personal and family privacy.

Subject	Activity	Content	Key Considerations for Students when Applying AI in Learning
<p>Primary Science (Upper Primary)</p>	<p>Campus Plant-explorers</p>	<p>Investigating Biodiversity and Classification on the School Campus</p> <ul style="list-style-type: none"> • The teacher leads students to investigate different plants on the school campus. Students begin by making careful first-hand observations of visible features, including leaves, flowers, fruits, stems and growing conditions. They record their observations using written notes, simple labelled diagrams or photographs. • In groups, students identify similarities and differences among the plants and propose a simple way to classify them. They use observable evidence, such as leaf shape, flower colour, plant height and growing location, to justify their classification. After completing their own observation and preliminary classification, students use an AI image recognition tool to support plant identification. They compare the AI-generated results with their own evidence and evaluate whether the suggested identification is consistent. • Students further check their findings by referring to plant guides, reliable websites, school plant records or their teacher’s advice. They then summarise their work into a concise Campus Plant Observation Record. 	<ul style="list-style-type: none"> • Respect for privacy and upholding ethics: When making observations and taking records, students should protect privacy, respect living things and care for the school environment. For example, they should avoid photographing people’s faces, and should not damage or remove plants. • Spirit of scepticism: Students should carry out their own observations and records before using AI as a support tool. They should avoid relying on AI for plant identification from the outset, or accepting AI-generated answers uncritically. • Critical thinking: Students should compare the AI-generated results with their own observations. For example, they should consider whether features such as leaf shape, flower colour and growing conditions match their observations, and judge whether the AI suggestion is reasonable. • Truth-seeking Spirit: Students should understand that AI cannot provide the final answer on its own. They need to verify the result further by consulting plant guides, reliable sources or the teacher’s guidance.

Subject	Activity	Content	Key Considerations for Students when Applying AI in Learning
Citizenship, Economics and Society (Junior Secondary)	Guardians of Truth	<p>Media and Information Literacy</p> <ul style="list-style-type: none"> Using real-life scenarios illustrating “Seeing is not always believing”, students are guided to analyse the ethical issues and risks arising from AI deepfake technology. The teacher can display AI-generated deepfake video clips generated to prompt students to reflect on the ethical challenges regarding integrity and responsibility when AI tools are maliciously misused for profit or to spread chaos. At the same time, the teacher and students explore practical techniques for identifying deepfakes, such as observing facial details (e.g. blinking or edge distortions) and conducting cross-verification of information. This helps students develop critical thinking skills and foster the correct attitude of proactive verification when encountering online misinformation. 	<ul style="list-style-type: none"> Spirit of scepticism and fact-checking: Students should understand that AI deepfake technology can cause harm to society and others. It is vital to develop critical thinking skills, maintain a skeptical attitude towards the authenticity of information, and refer to credible media, official sources, and verified content, thereby cultivating an awareness of fact-checking. Upholding ethics and abiding by the law: Students must also use digital technology correctly, employ AI tools in an ethical and law-abiding manner, and understand that the dissemination of information carries corresponding ethical and legal consequences.

VIII. Assessment of AI Literacy

The assessment of AI literacy should focus on whether students are able to “learn to apply, apply to learn, learn to think, think to innovate”. The relevant principles are as follows:

- **Diversified assessment modes:** The assessment of AI literacy should not be confined to pen-and-paper tests or rote memorisation of knowledge. Instead, a variety of modes should be used to assess students’ ability to apply knowledge, practical capabilities, and innovative thinking.
- **Process over outcome:** Based on the focus and design of the learning tasks, assessment should evaluate students’ understanding of the project, the process of interacting with AI, and the learning outcomes at different stages.
- **Anchored in authentic contexts:** Assessment should be anchored in problem scenarios that closely reflect real-life, in order to assess students’ ability to apply what they have learnt to solve practical problems, with a focus on higher-order thinking and the flexible application of knowledge across different domains.
- **Balancing knowledge and values:** Assessment should go beyond knowledge and technology, and cover ethical dimensions, critical thinking capabilities, and attitudes towards human-AI collaboration. The goal is to understand whether students are able to make good use of AI and collaborate with it for learning, problem-solving and innovation, as well as for the benefit of the community.

IX. Conclusion

The core of cultivating AI literacy is that students must not only understand how to use AI and other technological tools, but also be able to critically consider the purposes for which they are used, to critically evaluate AI output, and to retain the ultimate decision-making authority, avoiding blind reliance on AI. Students are the agents of their own learning and must never rely on AI to think on their behalf. Instead, they should make good use of AI as a collaborative tool to analyse and solve problems, actively scrutinise the accuracy of AI-generated outputs, and take responsibility for their final answers. Students must possess the ability to identify errors and misinformation, and decide whether to accept, reject, or modify outputs generated by AI in light of any ethical biases, thereby demonstrating critical thinking, and truly taking ownership in their learning and decision-making process.

In an era where AI application has become a normal part of daily life, students must demonstrate empathy and humanistic qualities when learning to apply AI to formulate solutions to social issues. We will develop students from “apply to learn” to “think to innovate”, enabling them to understand how AI operates, to use it responsibly, and to co-create with it solutions that benefit human well-being. By upholding the principle of “Technology for good”, students should actively embrace the opportunities and challenges brought about by technology.

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