

**AI Literacy Learning Framework for  
Primary and Secondary Schools  
Examples of Application Scenarios (June 2026)**

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# AI Literacy Learning Framework for Primary and Secondary Schools

## Examples of Application Scenarios

### Key Stage 1 (Lower Primary)

Subject	Activity	Content	Key Considerations for Students when Applying AI in Learning
<b>English Language</b> <i>(Lower Primary)</i>	<b>Module: Places and Activities</b>	<b>Unit: School days</b> <ul style="list-style-type: none"> <li>• Observing a set of printed photos of school facilities (e.g. playground, library, classroom), identifying which images may be generated by artificial intelligence (AI), explaining the reasons using simple descriptive language (e.g. “There are no doors in the music room.”, “I see a slide in the classroom.”), and developing an awareness that not all images are real</li> <li>• Sharing ideas about an ideal school in groups, presenting their ideas in class, and taking part in a teacher-guided discussion to agree on a class “ideal school”</li> <li>• Co-constructing a shared writing piece titled “My Dream School” using simple sentence structures (e.g. “The swimming pool is on the ground floor. It has a blue water slide.”), visualising the ideas through teacher-guided AI image generation, and refining the descriptions to better reflect the intended ideas</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Check validity:</b> AI pictures can sometimes look real but may contain inaccurate content. With teacher guidance, learn to observe details carefully and share your observations. This helps you understand that not all images you see are true.</li> <li>• <b>Value human interaction:</b> Develop communication and collaboration skills by sharing and presenting ideas about an ideal school—an important learning experience that AI cannot replace.</li> <li>• <b>Think critically:</b> When encountering elements in AI-generated images that seem unusual or unexpected, ask questions and share your thoughts. Through teacher support, learn to reflect on the class writing, identify areas for improvement and refine the writing.</li> </ul>

Subject	Activity	Content	Key Considerations for Students when Applying AI in Learning
<b>Music</b> <i>(Lower Primary)</i>	<b>Visible Music</b>	<b>Experiencing musical elements</b> <ul style="list-style-type: none"> <li>• The teacher plays suitable music and, while students listen, guides them to use movement to express the musical elements they hear.</li> <li>• As students use movement to represent these musical elements, AI transforms their movements (i.e. the musical elements) into dynamic lines, images, or colours on the screen, acting as a learning companion.</li> <li>• Through visual support and their own movement, students experience musical elements such as melodic contour, dynamics, and phrasing.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>AI should serve only as scaffolding to support learning and its use should be reduced as students gradually gain mastery:</b> As students accumulate experience, they should progressively rely less on visual aids and, after listening to a piece, be able to reflect its musical characteristics through movement on their own.</li> <li>• <b>The teacher’s demonstration and guidance remain essential:</b> although AI can provide visual support, the teacher’s demonstration during activities and the timely, individualised guidance offered in response to students’ performances are still indispensable.</li> </ul>

Subject	Activity	Content	Key Considerations for Students when Applying AI in Learning
<p><b>Physical Education</b> (Lower Primary)</p>	<p><b>Manipulative Skills – Under-arm Bean Bag Throwing and Catching</b></p>	<p><b>Mastering the movement skills of under-arm bean bag throwing - “Sequence”</b></p> <ul style="list-style-type: none"> <li>Students work in pairs to learn the movement skills of under-arm forward bean bag throwing. The movement is broken down into four sequential steps: 1) Extend the arm backward while holding the bean bag; 2) Step forward with the opposite leg and bend the knee slightly; 3) Keep the arm straight and swing it forward from low to high to release the bean bag between waist and shoulder height; 4) Follow through with the hand point toward the target. The partner is responsible for catching the bean bag and checking that each step of the under-arm throw was performed correctly.</li> </ul> <p><b>Experiencing how “Branching/Choice” leads to different outcomes through the under-arm bean bag throwing and catching game</b></p> <ul style="list-style-type: none"> <li>Students form groups of five. Four students act as defenders and perform under-arm bean bag throwing and catching in a square. The fifth student acts as the attacker: as soon as the defenders begin throwing and catching, the attacker runs around the outside of the square and tries to return to the starting position as quickly as possible.</li> <li>Different branches/choices occur during the game: IF the attacker returns to the starting point first, THEN the attacker scores 1 point. ELSE the defenders complete the continuous under-arm bean bag throwing and catching first, the attacker scores nothing. The attacker then switches roles with one of the defenders for another round of the game.</li> </ul>	<ul style="list-style-type: none"> <li><b>Importance of movement sequences:</b> Students understand that movement skills must follow the correct sequence of steps to achieve the intended learning outcomes. Incorrect sequencing of steps will lead to sub-optimal performance. Building in the principle of sequencing helps lay the foundation for computational thinking and develops logical reasoning, while these unplugged activities introduce the concept of artificial intelligence.</li> <li><b>Highlighting the importance of rule compliance through experiencing different outcomes of branching/choice:</b> In the game, students experience how “branching/choice” leads to varying results, helping them understand that everyone must adhere to the rules for the game to run fairly and smoothly.</li> </ul>

**AI Literacy Learning Framework for Primary and Secondary Schools**  
**Examples of Application Scenarios**  
**Key Stage 2 (Upper Primary)**

<b>Subject</b>	<b>Activity</b>	<b>Content</b>	<b>Key Considerations for Students when Applying AI in Learning</b>
<p><b>English Language</b> <i>(Upper Primary)</i></p>	<p><b>Module:</b> <b>The Magic of Nature</b></p>	<p><b>Unit: Taking care of our earth</b></p> <ul style="list-style-type: none"> <li>• Using an AI-powered tool with parameters pre-set by the teacher (e.g. word length) to extend vocabulary on green behaviours, noticing and learning additional words and phrases (e.g. save water, turn off lights) beyond those introduced in class</li> <li>• Applying target vocabulary and language items in new contexts on an AI-powered learning platform with simpler and scaffolded activities (e.g. fill in the blanks) or more challenging tasks (e.g. short paragraphs or multiple-choice with distractors) assigned based on individual students’ abilities, thereby helping them understand and reflect on their learning progress</li> <li>• Prompting AI to suggest ideas for a “Go Green Action Plan,” analysing with the guidance of the teacher whether the ideas are feasible, and co-constructing a final, realistic plan with AI using selected ideas and appropriate language</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Extend vocabulary:</b> Use AI-powered tools with pre-set parameters to broaden vocabulary related to environmentally friendly behaviours.</li> <li>• <b>Apply vocabulary in new contexts:</b> Apply target vocabulary and language items through AI-supported platforms with tasks suited to your abilities. Develop confidence in using language accurately and understand your learning progress.</li> <li>• <b>Think critically:</b> When using AI to generate suggestions for a “Go Green Action Plan”, assess the feasibility and relevance of the ideas. With teacher support, learn to select appropriate suggestions and organise them into a clear and realistic plan using suitable language.</li> </ul>

Subject	Activity	Content	Key Considerations for Students when Applying AI in Learning
<b>Mathematics</b> <i>(Upper Primary)</i>	<b>Constructing broken line graphs</b>	<b>Urban Population Growth</b> <ul style="list-style-type: none"> <li>• The teacher discusses the current approximate global population and explores some of the most populous cities with students.</li> <li>• Focusing on the population changes in one particular city (e.g., Hong Kong) in recent years, students work in groups to use artificial intelligence (AI) to search for the annual population figures of that city over the past 20 years. Students should also ask the AI to provide the sources of the data. Then, under the teacher’s guidance, they examine the reliability of the sources or search for relevant information on reliable websites (e.g., website of the Census and Statistics Department) and compare it with the AI-provided information. If the AI is unable to provide the required data, students may look for them from reliable websites with the teacher’s guidance.</li> <li>• Finally, using the population data across years, students construct broken line graphs to represent the changes in the city’s population. If necessary, they may round off the data or use a digital tool/software to generate broken line graphs. Teachers may arrange for students to conduct peer assessments of the broken line graphs they have constructed, and provide feedback to enhance students’ understanding of how to construct such graphs.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Thinking critically to recognise the capabilities and limitations of AI:</b> Students should understand that AI platforms may not always provide comprehensive or accurate information, nor necessarily draw on reliable sources to generate their answers. Students need to further verify the reliability of the information sources, or search for the required information from reliable websites themselves, for comparison and verification purposes.</li> <li>• <b>Spirit of skepticism and fact checking:</b> Students should learn to ask AI for the sources of information and, where necessary, verify them to ensure that the information is cited correctly by the AI.</li> <li>• <b>Using AI tools according to learning needs:</b> When searching for a city’s population data using AI, students learn how to operate AI tools effectively; for example, by writing suitable prompts to request the AI to list the data sources, or by using suitable AI tools to construct statistical graphs.</li> </ul>

Subject	Activity	Content	Key Considerations for Students when Applying AI in Learning
<p><b>Primary Science</b> (Upper Primary)</p>	<p><b>Campus Plant-explorers</b></p>	<p><b>Investigating Biodiversity and Classification on the School Campus</b></p> <ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li><b>Respect for privacy and upholding ethics:</b> 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.</li> <li><b>Spirit of scepticism:</b> 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.</li> <li><b>Critical thinking:</b> 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.</li> <li><b>Truth-seeking Spirit:</b> 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.</li> </ul>

<b>Subject</b>	<b>Activity</b>	<b>Content</b>	<b>Key Considerations for Students when Applying AI in Learning</b>
<p><b>Primary Humanities</b> <i>(Upper Primary)</i></p>	<p><b>Time Machine</b></p>	<p><b>Past and Present of Hong Kong</b></p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Fact-checking:</b> 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-checked and use accurate information. They should also reflect on the potential factors causing the errors made by AI tools and understand their limitations.</li> <li>• <b>Privacy protection:</b> 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.</li> </ul>

Subject	Activity	Content	Key Considerations for Students when Applying AI in Learning
<p><b>Music</b> <i>(Upper Primary)</i></p>	<p><b>A Fantasy Sound Journey on Campus</b></p>	<p><b>Create electronic music in context</b></p> <ul style="list-style-type: none"> <li>• Students collect and record sounds from real-life environments, then use AI to transform them into different instrumental timbres and create musical passages by combining various musical elements.</li> <li>• The teacher guides students to refine their work through trying out (performing/playback) and reviewing their work.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Thinking critically and maintaining control over music creating:</b> Students must not regard AI-generated works as the final outcomes of music creating.</li> <li>• <b>Ensuring students retain hands-on experiences throughout the learning process:</b> Students should not let AI replace their hands-on experience in music creating, performing/singing, and listening.</li> <li>• <b>Respecting intellectual property rights:</b> In some regions, the use of generative AI may give rise to issues related to music copyright and intellectual property infringement. Teachers and students should therefore exercise extra caution when using such tools and use them responsibly and prudently.</li> </ul>

Subject	Activity	Content	Key Considerations for Students when Applying AI in Learning
<b>Visual Arts</b> <i>(Upper Primary)</i>	<b>Spring Breeze and Splendid Chinese Attire</b>	<b>Short-sleeved crew-neck top design</b> <ul style="list-style-type: none"> <li>• Teachers use AI tools to analyse the expressiveness of lines and cultural symbols of the patterns of natural images in the artworks for appreciation, and incorporate these findings into teaching materials.</li> <li>• Teachers select images from the artworks for appreciation and use AI to generate different combinations and repetitive patterns, guiding students to appreciate and discover the visual effects within them.</li> <li>• Students use natural objects as their visual materials to design a short-sleeved crew-neck top suitable for wearing at the school's Lantern Festival celebration.</li> <li>• Students use AI to combine their draft design with a personal photo, previewing how the garment would actually look when worn. They then review and refine it.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Thinking critically and maintaining control over art making and art appreciation:</b> Students must never regard AI-generated works as the final outcome of art making or art appreciation.</li> <li>• <b>Ensuring students gain hands-on experiences throughout the learning process:</b> Students should not let AI replace their hands-on experience in art making and art appreciation.</li> </ul>

Subject	Activity	Content	Key Considerations for Students when Applying AI in Learning
<b>Physical Education</b> <i>(Upper Primary)</i>	<b>Athletics– Long Jump</b>	<b>Mastering long jump skills</b> <ul style="list-style-type: none"> <li>• Students practise long jump in a designated area during the lesson. In addition to receiving on-the-spot guidance from the teacher, students also refer to real-time suggestions generated by an AI camera system to correct their techniques.</li> <li>• Students upload their practice videos to the “Long Jump Assistant” chatbot, which was set up in advance by the teacher. The system analyses their performance based on the established movement criteria and provides improvement suggestions to help students enhance their performance.</li> <li>• Students review the movement analysis reports generated by the “Long Jump Assistant” chatbot, understand the recommended adjustments, and compile a personal “Sports Notes”. Under teacher’s guidance, they should record the key learning points for improving long jump skills, and integrate training principles and safety considerations to ensure that the feedback adopted suits their own conditions and support their learning.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Upholding critical thinking, avoiding uncritical reliance:</b> Students should understand that AI-generated information may contain “hallucinations”, that is, content generated by AI models that does not match reality. Students should verify information for themselves and exercise sound judgement, grounding their decisions in evidence and practice as they critically examine and evaluate whether the AI suggestions are appropriate. If in doubt, they should consult the teacher.</li> <li>• <b>Safeguarding personal data privacy:</b> As the use of AI in this activity involves video recording and uploading, students must pay strict attention to protection of personal data privacy and comply with the Personal Data (Privacy) Ordinance. When filming practice videos, students should ensure that the camera captures only the specific movement being practised. They should avoid capturing the faces of other classmates or any unrelated content, so as to avoid excessive data collection and to protect the privacy of others.</li> </ul>

**AI Literacy Learning Framework for Primary and Secondary Schools**  
**Examples of Application Scenarios**  
**Key Stage 3 (Junior Secondary)**

<b>Subject</b>	<b>Activity</b>	<b>Content</b>	<b>Key Considerations for Students when Applying AI in Learning</b>
<p><b>English Language</b> <i>(Junior Secondary)</i></p>	<p><b>Module: Wonderful Things</b></p>	<p><b>Unit: Successful People and Amazing Deeds</b></p> <ul style="list-style-type: none"> <li>• Prompting an AI tool to generate definition(s) of success and qualities of successful people (e.g. being proactive, perseverance, resilience, diligence), and preparing ideas for the writing topic through group discussion, reflection and revision of ideas</li> <li>• Generating a mind map for writing with the assistance of an AI-powered tool, planning on selecting a successful person and presenting his/her achievements and contributions to Hong Kong, our country and/or the world</li> <li>• Enhancing the draft with reference to collective feedback obtained from peers, the teacher and AI-powered marking tool</li> <li>• Using AI tools to generate images for a poster and polishing the language to promote perseverance in the “Week of Grit”, making appropriate reference to the parts where AI tools were used</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Accountable collaboration:</b> After prompting an AI tool for definitions of success, discuss the suggestions in groups, reflect on them, and decide on the content and focus of your own writing. Use feedback from peers, teachers, and AI tools to improve your draft, but make the final editing choices yourself.</li> <li>• <b>Fact-checking:</b> When using an AI tool to plan and organise an essay about a successful person, evaluate and verify his/her achievements and contributions provided by the tool with reliable sources such as official websites and library archives.</li> <li>• <b>Prompt engineering:</b> When using AI tools to generate images or polish the wording for an infographic poster, refine and test prompts to guide AI models to produce accurate, relevant, and high-quality outputs which enhance the conveyance of your messages.</li> </ul>

Subject	Activity	Content	Key Considerations for Students when Applying AI in Learning
<b>Mathematics</b> <i>(Junior Secondary)</i>	<b>Mathematical modelling activities</b>	<b>Explore the best food delivery platforms</b> <ul style="list-style-type: none"> <li>• Students analyse a real-world problem about choosing a food delivery platform, identify the key factors for determining the best platform, search for relevant information on the Internet, and propose assumptions to build a scoring model using mathematics.</li> <li>• After establishing an initial model, students use artificial intelligence (AI) tools to assist with calculations. They input the key factors under consideration and the data collected (e.g., user ratings of different platforms) into the AI tools to help generate the model’s results.</li> <li>• Students should maintain a skeptical attitude towards the AI output, examine the results generated by AI tools and the methods it used to assess their reliability, and perform further calculations themselves where necessary. Finally, students interpret the model’s results in the context of the real world problem, select the best food delivery platform, and reflect on the strengths and limitations of the model.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Using AI to assist with mathematical modelling:</b> When students engage in mathematical modelling, they can use AI to help them to understand the real-world problem or to organise and analyse data, so that they can free up time to focus on thinking processes, such as understanding the problem and formulating assumptions, while also verifying the source of the data.</li> <li>• <b>Thinking critically:</b> Students should be aware that AI-generated content may be incorrect or inappropriate, and should therefore examine whether the results produced by the AI tools are accurate or suited to the context of the problem.</li> <li>• <b>Being mindful of the consequences of over-reliance on AI:</b> If students simply ask AI to generate and evaluate a mathematical model based on the problem situation, without applying their own thinking and judgement in the process, they will lose the opportunity to develop their mathematical modelling and problem-solving abilities. Students should use AI as a tool to support inquiry and reflection, thereby enhancing their ability to think independently, evaluate, and solve problems, and to further validate the mathematical models which they have built.</li> </ul>

<b>Subject</b>	<b>Activity</b>	<b>Content</b>	<b>Key Considerations for Students when Applying AI in Learning</b>
<b>Citizenship, Economics and Society</b> <i>(Junior Secondary)</i>	<b>Guardians of Truth</b>	<b>Media and Information Literacy</b> <ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Spirit of scepticism and factchecking:</b> 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.</li> <li>• <b>Upholding ethics and abiding by the law:</b> 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.</li> </ul>

Subject	Activity	Content	Key Considerations for Students when Applying AI in Learning
<p><b>Music</b> <i>(Junior / Senior Secondary)</i></p>	<p><b>The characteristics of Rhythm and Blues (R &amp; B)</b></p>	<p><b>Through listening, improvising, and adapting song excerpts, students further grasp the musical characteristics of rhythm and blues (R&amp;B).</b></p> <ul style="list-style-type: none"> <li>• Students use AI track/source separation tools to split the selected R&amp;B passage into its individual tracks.</li> <li>• The teacher guides students to describe each track and its mixing characteristics using appropriate musical terminology, and to analyse its stylistic features.</li> <li>• Students listen to the separated drum and harmony tracks and improvise vocals over them, then import the relevant tracks into a digital audio processing application to edit excerpts and adapt them by incorporating R&amp;B elements.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Thinking critically and maintaining control over music creating:</b> Students must not regard AI-generated works as the final outcomes of their music creating.</li> <li>• <b>Ensuring students retain hands-on experiences throughout the learning process:</b> Students should not let AI replace their hands-on experience in music creating.</li> <li>• <b>Respecting intellectual property rights:</b> In some regions, the use of generative AI may give rise to issues related to music copyright and intellectual property infringement. Teachers and students should therefore exercise extra caution when using such tools and use them responsibly and prudently.</li> </ul>

Subject	Activity	Content	Key Considerations for Students when Applying AI in Learning
<b>Visual Arts</b> <i>(Junior / Senior Secondary)</i>	<b>Sit Together, Talk Together and Share Together</b>	<b>School Garden Bench Design</b> <ul style="list-style-type: none"> <li>• Teachers select several classic chair designs from different times and places, and use AI to design game cards for art appreciation activities, thereby sparking students' interest and engagement in learning design appreciation.</li> <li>• Students design a bench for the school garden to facilitate interaction among students and between teachers and students.</li> <li>• To understand users' needs, students work in groups to interview different users on campus, use AI to design the interview questions, and to analyse and summarise users' viewpoints, which then inform the design.</li> <li>• Students use AI to apply suitable materials to their bench design sketches to test and observe the effectiveness and suitability of these materials.</li> <li>• Students then “place” the more suitable design sketches onto the image of the school garden to assess how well the design fits into the actual environment, thereby making adjustments and improvements to the design.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Thinking critically and maintaining control over art making and art appreciation:</b> Students must not regard AI-generated works as the final outcome of art making or art appreciation.</li> <li>• <b>Ensuring students gain hands-on experiences throughout the learning process:</b> Students should not let AI replace their hands-on experience in art making and art appreciation.</li> </ul>

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<b>Physical Education</b> <i>(Junior / Senior Secondary)</i>	<b>Physical Fitness Activities: Health-related Fitness</b>	<p><b>Exploring the relationship between body composition and health, and designing an individualised training programme based on the training goals</b></p> <ul style="list-style-type: none"> <li>Students use a body composition analyser and height-weight measurement equipment to measure their height, weight, body mass index (BMI), body fat percentage and muscle percentage. Based on the analysis results, they discuss the results with group members, set personal training goals and use AI to search for circuit training programmes that match their goals and deliver specific training effects. They then decide whether to adopt these programmes based on their own condition. Students may also consult classmates and teachers to ensure that the programmes meet their individual needs and are both safe and effective.</li> <li>Students watch the teacher demonstrate how to use AI to search for training programmes to gain an initial understanding of the kind of suggestions AI produces. They carry out the first cycle of training after the teacher has reviewed the plans. They then engage in a group discussion to evaluate the pros and cons of different training programmes, followed by another round of AI search for improved options or adjustments based on peer feedback. Students submit the revised plans for teacher review and complete a second cycle of training. They examine and compare the designs and results of the two cycles to confirm the effectiveness of the changes.</li> </ul>	<ul style="list-style-type: none"> <li><b>Safeguarding sensitive personal data:</b> When using AI to search for and handle information, students must ensure that the personal data is “anonymised”. For example, only anonymised data should be provided when they enter prompts or upload data. They must never enter, upload or store identifying details such as real names or student numbers, so that their privacy stays secure.</li> <li><b>Cross-checking from multiple sources:</b> Students should understand that AI recommendations are often based on “mainstream answers” derived from large datasets, so the generated results may not fully address an individual’s needs. Students should check and compare information for themselves rather than accepting it without question. If in doubt, they must seek their teacher’s review to ensure safety and accuracy.</li> <li><b>Staying level-headed:</b> When reviewing movement analysis or data generated by AI, students should weigh up how accurate it really is, bearing in mind that such results are for reference only and do not represent an absolute standard. Students should adopt an objective and impartial attitude, to avoid any discrepancies between their personal data and big data benchmarks, putting unnecessary psychological pressure on them. The focus should remain on steady progress, and overall physical and mental well-being, ensuring that the learning process remains safe and effective.</li> </ul>

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**Examples of Application Scenarios**  
**Key Stage 4 (Senior Secondary)**

<b>Subject</b>	<b>Activity</b>	<b>Content</b>	<b>Key Considerations for Students when Applying AI in Learning</b>
<p><b>English Language</b> <i>(Senior Secondary)</i></p>	<p><b>Module: Nature and Environment</b></p>	<p><b>Unit: Protecting the Environment</b></p> <ul style="list-style-type: none"> <li>• Conducting online research using AI-powered tools (such as intelligent search engines or chatbots) to gather diverse perspectives on environmental issues, and then critically evaluating the information for bias, reliability, and relevance using a structured framework (e.g. CRAAP test*).</li> <li>• Creating multimodal texts (e.g. infographics, posters, photo poetry) using generative AI to promote environmental awareness and sustainability through visual storytelling</li> <li>• Engaging in a debate competition where student teams interact with AI-simulated opponents to develop rebuttal strategies and persuasive argumentation on environmental protection topics</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Check validity:</b> AI can generate factually inaccurate content that is seemingly convincing. Apply structured evaluation methods like the CRAAP test to ensure information is reliable, current, and free from bias before using it.</li> <li>• <b>Promote integrity:</b> When creating multimodal texts with generative AI, avoid plagiarism and misrepresentation. Clearly acknowledge AI’s role and relevant source(s) of information where necessary in the creative process to maintain transparency and uphold academic honesty.</li> <li>• <b>Think critically:</b> In debate competitions with AI-simulated opponents, treat AI arguments as practice prompts, not ultimate truths. Responsible use means questioning assumptions, refining your reasoning, and ensuring your arguments are grounded in evidence.</li> </ul>

\*The CRAAP test is a structured framework used to evaluate the quality of information. It stands for **C**urrency, **R**elevance, **A**uthority, **A**ccuracy, and **P**urpose — five criteria that help students judge whether a source is reliable, unbiased, and suitable for academic use.

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<b>Mathematics</b> <i>(Senior Secondary)</i>	<b>Learning the equation of a circle</b>	<b>Using artificial intelligence to support understanding of the equation of a circle</b> <ul style="list-style-type: none"> <li>• The teacher creates an Artificial Intelligence (AI) chatbot and inputs relevant teaching materials and reference resources into its knowledge base, in order to control the scope of the AI’s responses (e.g., providing guiding questions as hints or follow-up prompts instead of directly providing the steps and answers) to support students' self-directed learning.</li> <li>• Students think through the AI-generated questions, gradually developing their understanding of the equation of a circle and ultimately mastering related concepts.</li> <li>• During the learning process, students need to answer the questions posed by the AI in order to progress. When interacting with the AI, they should use effective prompts, such as: “Please give me a clear hint”, “Please explain in simpler terms how a straight line and a circle could intersect”, or “Is this step correct?”, to effectively communicate with the AI, overcome difficulties, and enhance learning outcomes.</li> <li>• When encountering difficulties, students can ask AI for further hints, such as simplified steps or explanations using diagrams, and then reflect further before attempting to answer the questions posed by the AI.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Being mindful of the consequences of over-reliance on AI:</b> when faced with challenging mathematical problems, students have to think independently and attempt to solve them themselves. If unsuccessful, they should know how to interact with the AI effectively to work through the problem, and understand that requesting answers directly from the AI will hinder the development of their problems-solving skills.</li> <li>• <b>Using AI for self-directed learning:</b> Students should develop effective ways of using AI for self-directed learning, such as asking the AI for further explanations, generating appropriate assessment exercises based on the strengths and weaknesses in their own mathematical knowledge and skills, and providing feedback in line with their understanding of concepts.</li> </ul>

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<p><b>Health Management and Social Care</b> <i>(Senior Secondary)</i></p>	<p><b>Individual and Community Health</b></p>	<p><b>Using AI to Promote Individual and Community Health</b></p> <ul style="list-style-type: none"> <li>• <b>Data analysis:</b> Students track and collect data on their physical, mental, and social health using wearable devices and applications. They then use an AI platform to analyse and synthesise the data and review their overall state of holistic health.</li> <li>• <b>AI application and impact:</b> In class, students discuss the latest developments of AI in health technology, focusing on its applications in and impact on health and social care, as well as the advantages and constraints of using AI for personal health management.</li> <li>• <b>Using AI to promote community health:</b> Students extend applications to scenarios involving care for the community and vulnerable groups. They use AI to help them think through simulated scenarios, such as “How could smart wearable devices and AI technology be used to improve fall monitoring and address social isolation among elderly people living in residential care homes or living alone?”</li> <li>• <b>Self-directed learning:</b> Students make effective use of AI-driven data in their daily lives to manage their health, building healthy eating habits (by tracking nutrition and calorie intake) and an active lifestyle (by keeping an eye on exercise frequency and intensity, and calorie output).</li> <li>• <b>Data privacy:</b> Students discuss and reflect on how the AI applications and platforms involved handle personal data throughout the learning process. For example, will physical health data be shared with third parties; what are the potential privacy risks?</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Seeking truth:</b> Avoid relying on the medical or health advice generated by AI. Use AI as one source of health information, among others, or as a tool for developing students’ higher-order thinking abilities.</li> <li>• <b>Thinking critically:</b> Avoid asking or allowing students to submit content or suggestions directly generated by AI. Students should not treat the AI-generated health information as fact without verification. They should develop the ability to think critically about health information.</li> <li>• <b>Respecting privacy:</b> When AI tools are used to collect personal health data, the Personal Data (Privacy) Ordinance must be complied with, in order to teach students to understand and respect privacy.</li> </ul>

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<p><b>History</b> (<i>Senior Secondary</i>)</p>	<p><b>Study Group on the international situation in the inter-war period</b></p>	<p><b>A global perspective on the international situation between the two World Wars</b></p> <ul style="list-style-type: none"> <li>• Under the teacher’s guidance, students first learn the relevant foundational historical knowledge about the international situation between the two World Wars. Students then form study groups to formulate their own inquiry questions regarding the international situation in the inter-war period, such as the difficulties facing Europe after the First World War, the economic prosperity and diplomacy of the United States, the founding of the Soviet Union and its construction of socialism, as well as the formation and development of militarism in Japan, Fascism in Italy and Nazism in Germany, etc.</li> <li>• In the course of their inquiry, students draw on their historical knowledge to write prompts, use AI tools to analyse their inquiry questions, break them down into sub-questions. Under the teacher’s guidance, students compare and evaluate the AI-generated content against their historical knowledge and further refine their prompts, so as to improve the quality of the content provided by AI.</li> <li>• Students can also use AI tools to collect relevant historical sources (e.g. photos, cartoons, statistics and written sources, etc.), and, making reference to teacher’s feedback and their own historical knowledge, complete learning tasks such as analysis and synthesis, in order to respond to their inquiry questions in a holistic and reasonable manner.</li> <li>• Each student group share their enquiry findings, and under the teacher’s guidance, apply high-order thinking skills to synthesise the learning outcomes of different groups, so as to develop a macro-understanding of the international situation in the inter-war period and explore in an integrated way the causal relationships between the relevant international situation and the two World Wars.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Being skeptical:</b> Students should first learn the relevant historical knowledge and use it to examine AI-generated information. They should avoid relying on, or even directly adopting the information provided by AI.</li> <li>• <b>Checking with facts:</b> Students should use different types of historical sources to conduct comparisons and analyses of the AI-generated information, thereby determining whether the information is accurate and reliable.</li> <li>• <b>Thinking critically:</b> Students should understand that AI is merely an assistive learning tool. The content provided by AI may be inaccurate, or even contain ‘biased’ viewpoints. Students should prudently consider and discern the validity and limitations of the AI-generated information.</li> <li>• <b>Pursuing the truth:</b> Students should employ historical knowledge and historical skills and incorporate diverse historical sources (including AI-provided and critically-reviewed materials), so as to develop an understanding of history from multi-perspectives and in an objective manner.</li> </ul>