

Exploring Artificial Intelligence Series:

(2) Enhancing Students' Self-directed Learning Capabilities and English Reading and Writing Skills at the Primary Level

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Objectives of workshop

- To enhance teachers' knowledge and understanding of the basic concepts of Artificial Intelligence (AI) in relevance to English Language learning at the primary level;
- To explore effective AI tools and strategies that can be adopted in primary English reading and writing activities while promoting self-directed learning;
- To provide insights on how to integrate AI into the reading and writing curriculum through holistic planning;
- To raise teachers' awareness of and provide solutions to address the limitations of and concerns about the use of AI (e.g. aspects of media and information literacy); and
- To enhance teachers' capacity in integrating AI into the design of learning, teaching and assessment activities to promote self-directed learning and enhance students' reading and writing skills.

1. Introduction

What is Artificial Intelligence (AI)?

- Artificial intelligence (AI) is the ability of a digital computer or computer-controlled robot to perform tasks commonly associated with intelligent beings.
- Artificial Intelligence (AI) is good at helping people solve routine challenges. A dominant technique in developing effective AI is Machine Learning (ML). ML is used to develop AI by getting computers to do something without being programmed with super-specific rules. ML can help machines recognise patterns and adjust to unique situations, like providing translation services in a variety of languages.

Sources:

- (1) <https://www.britannica.com/technology/artificial-intelligence>
- (2) <https://aied.talic.hku.hk/teaching-and-learning/terminologies/>

What is Artificial Intelligence (AI)?

- Artificial intelligence (AI) is one of the systems that makes the computer and machine **respond like human intelligence** (Dodiya and Shah (2021) cited in Saha, et al. (2025)).
- AI can aid education by automating skilled administrative tasks to allow teachers more time to teach and engage with students in personalised ways, **augmenting rather than replacing human-led teaching** (Milberg, 2024).

Differences between AI and GEN-AI

AI	GEN-AI
<p>AI refers to the broader field of creating machines that can perform tasks that typically require human intelligence. This includes:</p> <ul style="list-style-type: none">Analysing data to recognise patternsMaking decisions based on that dataLearning from experiences to improve over time	<p>Generative AI is a subset of AI focused on creating new content. It uses patterns learnt from existing data to generate:</p> <ul style="list-style-type: none">Text (like writing articles or stories)Images (like creating artwork or realistic photos)Audio (like composing music)Videos and even 3D models
<p>Scope: AI is a broad field that includes various types of intelligence and applications, while Generative AI specifically focuses on creating new content.</p> <p>Function: Traditional AI analyses and interprets existing data, whereas Generative AI generates new data from learnt patterns.</p>	

Sources:

<https://www.coursera.org/articles/ai-vs-generative-ai>

<https://www.digital-adoption.com/ai-vs-generative-ai/>

AI in education

According to Pokrivcakova (2019, pp.140-143), AI has a potential to make **digital language learning** truly personalised to each learner. Here are some common forms of application of AI in language education:

- a) Generating personalised learning materials
- b) Using machine translation tools
- c) Utilising AI writing assistants
- d) Conversing with chatbots
- e) Applying AI-powered language learning software
- f) Relying on intelligent tutoring systems (ITS)

Pointers from EDB

English Language Education

Key Learning Area Curriculum Guide
(Primary 1 – Secondary 6)



Yet, lesson time on developing students' language skills should not be sacrificed due to the use of AI tools.

3.2.3 Promoting e-Learning and Information Literacy

Schools are encouraged to enhance students' learning experiences through **making effective use of IT to enhance collaboration and interaction** inside and outside the classroom, build learning networks, and **promote self-directed learning**.

4.2.5 Adopting e-Learning in the English Language Education Classroom

e-Learning refers to an open and flexible learning mode involving the use of the electronic media, including the use of digital resources and communication tools to achieve the learning objectives. In the context of the English Language Education KLA, e-learning not only fosters **purposeful communication and interaction among students** and between students and teachers, but also contributes to **effective learning and teaching**.

Pointers from EDB



培養學生媒體和資訊素養

2023/2024 學年

- 資訊科技的發展一日千里，促使網路媒體的蓬勃發展。人們隨時隨地可以接收及分享資訊，媒體無疑成為生活中不可或缺的部分。然而，近年虛假和兒童不宜的資訊已成為全球關注的焦點。任何人士都可以輕易地扮演資訊製作者的角色。網絡欺凌、受騙和沉迷上網的情況於世界各地均日趨嚴重。
- 學校及教師培養學生媒體和資訊素養，刻不容緩，使他們能有效及符合道德地運用資訊及資訊科技，並成為負責任的公民及終身學習者。教師應在日常教學中有機結合自然連繫相關的教學內容及活動，幫助學生辨識資訊；尋找、評鑑、提取、組織、表達訊息；創造新的意念；應對資訊世界的變化，以及拒絕不道德地使用媒體、資訊及資訊科技（如：侵犯知識產權），同時保護自己免受負面不良的網上訊息所影響，以達至健康的數碼生活。

Media and information literacy

Students should be guided to identify bias and stereotypes, evaluate, extract, organise and synthesise ideas and use information ethically.

According to the **“Information Literacy for Hong Kong Students” Learning Framework (Updated Version)**, there are nine literacy areas in developing students’ knowledge, skills and attitudes:

1. Use, provide and communicate information effectively, ethically and responsibly
2. Identify and define a need for information
3. Locate and access relevant information
4. Evaluate information, media content and information sources/providers
5. Extract and organise information, create and present new ideas
6. Apply IT skills to process information and produce user-generated content, and adopt a reflective mindset when sharing information
7. Recognise the roles and functions of information providers in society
8. Recognise the conditions under which reliable information could be obtained
9. Recognise the ethical issues arising from the application of emerging and advanced information technologies

Source: EDB "Information Literacy for Hong Kong Students" Learning Framework (2024)

<https://www.edb.gov.hk/en/edu-system/primary-secondary/applicable-to-primary-secondary/it-in-edu/Information-Literacy/il-index.html>

2. Using AI tools and strategies to promote self-directed learning/
independent learning

AI as a companion in the learning process:

- AI as a reading buddy

- Besides using the e-book, AI-powered tools can be used to do read-aloud practice with students.

AI as a companion in the learning process:

- AI as an interlocutor

- Select a story character whom students are familiar with
e.g. Red-Riding Hood
- Invite students to set questions with the teacher for an upcoming interview with this character

Prompt given to the Chatbot

AI as a companion in the learning process:

- AI as a motivator (to motivate students to read)**

Possible activities to do:

- A fun fact a day
- Read aloud
- Silent independent reading
- Warmers
- ...

Gentle reminders:

- Select fun facts that young learners would find fun
- Use fun facts that are culturally relevant to our young learners
- Replace those that are too cognitively/ linguistically demanding

Self-regulation features in AI tools

An example – Doing a writing task in a P3 classroom

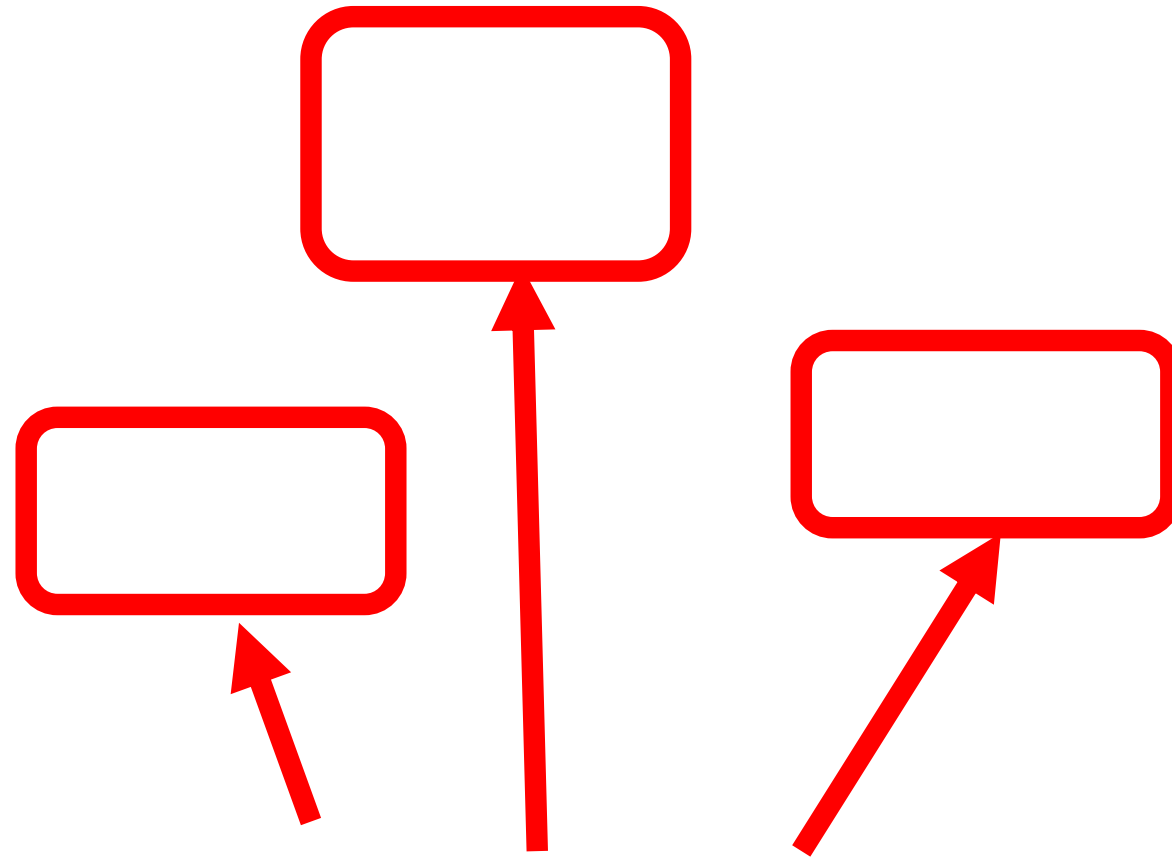
- 1. Promote self-/ peer- evaluation**
- 2. Develop a proofreading habit**

- Teachers' capacity can be enhanced with the effective use of AI tools:
 - Help teachers develop assessment rubrics
 - Facilitate self regulation among learners
 - Make adaptation to the form to **design self- or peer- evaluation sheets**

Story Writing Rubric: Comic Book Narrative Scoring Guide:

Total Possible Points: 20
18-20 Points: Exceptional
15-17 Points: Proficient
12-14 Points: Developing
0-11 Points: Emerging

- Use AI-Powered tools to design specific writing rubrics
- **For teachers** – to assess students' work
- **For students** – to exercise self-assessment/ peer-evaluation



Some metalanguage may be too hard for young learners -Need to make adaptations using our professional judgement

Self-regulation features in AI tools

- Encourage students to **develop a proofreading habit**
→ Using AI-powered tools to proofread written work

Self-regulation features in AI tools

Reminder

Teachers / parents should provide guidance to students when they are interacting with AI chatbots: AI chatbots may set a minimum age for users and require students under a specified age to obtain parent or guardian's permission before use. Teachers / parents may prompt AI chatbots to provide age-appropriate responses to reduce the chance of children being exposed to inappropriate content.

Source: 10 TIPS for Users of AI Chatbots

香港個人資料私隱專員公署

Office of the Privacy Commissioner for Personal Data, Hong Kong

https://www.pcpd.org.hk/english/resources_centre/publications/files/ai_chatbot_leaflet.pdf

3. Using AI tools and strategies to enhance motivation and engagement in reading and writing activities

	Using AI tools and strategies to enhance motivation and engagement in reading and writing activities
3.1	Using Magic School (Exemplar & Non-Exemplar) to enhance semantic knowledge
3.2	Using TTSMP3 to enhance phonemic awareness/ enhance spelling accuracy
3.3	Using Canva to enhance multimodal literacy
3.4	Using Copilot to set reading comprehension questions on particular reading skills/ adjust level of difficulty of reading texts to cater for learner diversity
3.5	Using Magic School to help students generate writing ideas
3.6	Using Book Creator to exercise shared writing

3.1

Using **Magic School** (Exemplar & Non-Exemplar) to enhance semantic knowledge

- **Vocabulary development** is closely related to general linguistic competence and to reading comprehension. It is the building block of literacy development.
- Use the **Framer Model** to teach and learn vocabulary

e.g. Countable nouns - Food

Definition <i>Countable nouns are nouns that refer to things that can be counted as individual units. They have both singular and plural forms.</i>	Characteristics (with picture illustration if possible) <i>Food items that can be counted. They usually end with the suffix –s or –es.</i>
Examples	Non-examples

The Frayer Model

Definition

Countable nouns are nouns that refer to things that can be counted as individual units. They have both singular and plural forms.

Characteristics (with picture illustration if possible)

Food items that can be counted. They usually end with the suffix –s or –es.

Examples

apple, banana, sandwich, cookie, carrot

Non-examples

fruit, bread, juice, chicken, soup

3.1

Using **Magic School** (Exemplar & Non-Exemplar) to enhance semantic knowledge - **IMPLICATIONS**

- Pre-writing task – provide vocabulary input to learners
- Use AI-powered tools in lessons to enrich input delivery – with teacher supervision
- Brainstorm ideas WITH students
- Differentiate countable nouns from uncountable nouns to enhance grammatical accuracy
 - Use plural suffixes –s and –es
 - Use quantifiers

3.2

Using **TTSMF3** to enhance phonemic awareness/
enhance spelling accuracy

- Help students identify letter-sound relationship to enhance **spelling** accuracy
- Use 'non-sense' words to raise awareness of letter-sound relationship

- Check the **pronunciation** of the following words:

- *Furit/ Fruit

- *mik/ milk

- *sandwish/ sandwich

- *bananana/banana

- *stawberries/ strawberries

3.2

Using **TTSMF3** to enhance phonemic awareness/
enhance spelling accuracy - **IMPLICATIONS**

- Encourage students to identify the letter-sound relationship
- Different spelling → Different pronunciation
- Dictionary is not the only tool to check spelling.
- Improve spelling accuracy

3.3

Using **Canva** to enhance multimodal literacy

- Introduce multi-modal texts to students
e.g. posters, advertisements, webpages, videos, etc.
- Users can modify templates of multi-modal texts.
- Multimodal literacy is enhanced when students comprehend meaning from different modes of presentation in texts (e.g. images/ visuals, written texts).

3.3

Using **Canva** to enhance multimodal literacy - **IMPLICATIONS**

- Teachers do not need to 'start from scratch' when teaching a new text type.
- Templates of multi-modal texts are readily available.
- Changes can easily be made and images can be inserted.
- Co-construction with students can be done easily, and modifications can be done in subsequent lessons (after having saved the co-constructed text).

3.4

Using **Copilot** to set reading comprehension questions on particular reading skills/
adjust the level of difficulty of reading texts to cater for learner diversity

Why Healthy Eating is Super Important

Eating healthy is like giving your body the best fuel to run on. When you eat fruits, vegetables, and grains, you get lots of vitamins and minerals. These help you grow strong and stay active. Imagine your body as a car; without good fuel, it won't run well!

Healthy eating also means having a balanced diet. This means eating different kinds of food like apples, carrots, and rice. It's important to drink enough water too. Junk food like chips and soda might taste good, but they don't give your body what it needs to stay healthy.

Lastly, eating well can make you feel great! When you eat healthy foods, you have more energy to play and learn. Plus, it helps you avoid getting sick. So, remember to choose healthy snacks and meals every day. Your body will thank you!

A reading text for
KS2 learners

An article about
healthy eating

3.4

Using **Copilot** to set reading comprehension questions on particular reading skills/
adjust the level of difficulty of reading texts to cater for learner diversity

IMPLICATIONS

- Feed AI with an existing text – it will help teachers cater different learning needs by:
 - modifying the text
 - setting reading comprehension questions
- Use metalanguage when giving prompts to AI; the more detailed the better
e.g. Meaning of idiomatic expressions; implied meaning of words; interpretation of writer's intention; identify sequence of events, identify main ideas and supporting details, etc.

(refer to the Language Progression Framework (LPF) for more)

<https://www.edb.gov.hk/attachment/en/curriculum-development/kla/eng-edu/references-resources/LPF/website/lpf/index.html>

3.5

Using **Magic School** to help students generate writing ideas

- **Idea Generator**

3.5

Using **Magic School** to help students generate writing ideas

IMPLICATIONS

- Avoid over-reliance on AI
e.g. direct copying from what AI generates
- AI-generated ideas can be too challenging for young learners
e.g. *Examine the connection between proper nutrition and athletic performance, showing how the right foods can improve strength, endurance, and recovery time after physical activities.*
- Teachers need to play the role as mediators when leveraging AI to enhance development of writing skills.

3.6

Using **Book Creator** to exercise shared writing

- Teacher works with the whole class in a writing task.
- The whole class (including the teacher and students) writes a common piece of text on this e-learning platform.
- Teacher and students work together to model, explore and discuss the decisions that writers make in the shared writing process.

3.6

Using **Book Creator** to exercise shared writing - **IMPLICATIONS**

- Co-construction is made possible and easy at the while-writing stage.
- Shared writing can facilitate interaction between the teacher and students.
- Teachers can deliberately make mistakes to get students to notice target grammatical structures.
- Other functions such as 'Read to me' can be used for audio support.
- 'Sharing' function enhances peer sharing.
- 'AI Image Generator' can be used to generate pictures, and this can be a form of instant feedback on students' writing. As students revise their prompts to get a better image, they are encouraged to review their written work and write in more detail with descriptive language.

	Using AI tools and strategies to enhance motivation and engagement in reading and writing activities
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Gentle reminders

Many tools introduced in this workshop are free but sometimes **commercial** banners/links may pop up. We need to be careful when using these in the classrooms. **BEWARE!**

On these AI tool sites, we may explore reading their **privacy and security policy**. For example, some indicate that they may share users' data with certain third parties for promotion purposes. **BEWARE!**

Tools introduced just now are demonstrated using the 'basic account'. Users are always invited to **pay and subscribe** to enjoy full access of other advanced features. **BEWARE!**

Since we are planning to use these tools in primary classrooms with young learners, teachers and parents' supervision is necessary. **BEWARE!**

4. Holistic planning of the reading and writing curriculum

Infusing AI into a unit plan (Reading/Writing)

Situation

Your school is organising a 'Healthy lifestyle' month. Your class teacher is asking you to design a poster to promote healthy eating to your classmates.

Putting the puzzle pieces together in a reading/ writing lesson

3.1 Using **Magic School** (Exemplar & Non-Exemplar) to enhance semantic knowledge

3.2 Using **TTSMF3** to enhance phonemic awareness/ enhance spelling accuracy

3.3 Using **Canva** to enhance multimodal literacy

3.4 Using **Copilot** to set reading comprehension questions on particular reading skills/ adjust the level of difficulty of reading texts to cater for learner diversity

3.5 Using **Magic School** to help students generate writing ideas

3.6 Using **Book Creator** to exercise shared writing

An example of a unit plan

A writing plan – Designing a poster

Procedures and activities	Rationales	Use of AI tools
Pre-Reading/Writing stage		
Setting the scene <ul style="list-style-type: none">- Show students a short video/ brochure of healthy tips (e.g. do exercise, have a healthy eating diet, have enough sleep, etc.)- Conduct Think-Pair-Share to invite students to reflect on their lifestyle	<ul style="list-style-type: none">- Activate schemata about the topic (i.e. a healthy lifestyle)	
Introduction of writing task <ul style="list-style-type: none">- Give instructions to students about the writing task- Show and get students to read examples of a poster- Provide vocabulary input- Teach the concept of countability using the Frayer Model	<ul style="list-style-type: none">- Familiarise students with the textual features of a poster- Prepare students for an upcoming writing task by providing vocabulary and grammar input	<p>Use Magic School (Exemplar & Non-Exemplar) to enhance semantic knowledge (Refer to previous slide 3.1)</p> <p>Use TTSMP3 to enhance phonemic awareness/ enhance spelling accuracy (Refer to previous slide 3.2)</p>

Procedures and activities	Rationales	Use of AI tools
<h1>While-Reading/Writing stage</h1>		
<ul style="list-style-type: none">- Practise writing some sentences with students on Book Creator- Provide reading materials for learners to facilitate brainstorming of ideas- Teacher may deliberately make mistakes to enhance noticing- Show students a template of a poster on Canva/ Get students to read the poster and identify textual features- Invite students to co-construct a few sentences with the teacher as a demonstration on Canva- Give students time to complete their poster/ Assign writing task as homework if students can't finish the task within class hours	<ul style="list-style-type: none">- Communicate expectation with students (e.g. use both words and images in the poster)- Doing shared writing with students can enhance engagement and interaction- Acknowledge students' production when their work is 'published'	<p>Use Canva to enhance multimodal literacy (Refer to previous slide 3.3)</p> <p>Use Copilot to set reading comprehension questions on particular reading skills/ adjust the level of difficulty of reading texts to cater for learner diversity (Refer to previous slide 3.4)</p> <p>Use Magic School to help students generate writing ideas (Refer to previous slide 3.5)</p> <p>Use Book Creator to exercise shared writing (Refer to previous slide 3.6)</p>

A writing plan – Designing a poster

Procedures and activities

Rationales

Use of AI tools

Post-Reading/Writing stage

- Use QuillBot to demonstrate how proofreading is done to let students focus on common mistakes made
- Explain to students how they may use the rubrics to evaluate their work
- Put students in pairs to read and revise/ share their poster with one another

- Teacher demonstrates doing proofreading to promote self-regulation of own writing
- Promote self-directed learning by exercising self/ peer evaluation

Teacher uses **QuillBot** to demonstrate proofreading of student work

(Refer to previous slides)

Teacher uses **Magic School** to generate rubrics to facilitate self/ peer evaluation

(Refer to previous slides)

Gentle reminder

- 1. Many AI platforms have multiple tools available for use. This can save students time switching between platforms. This can also make the collection of learning evidence easier for teachers.**
- 2. The example given in the previous slides is only an example of how AI tools can be incorporated in a unit. Teachers are suggested using these tools judiciously.**

More food for thought

- These are other useful AI-powered tools/ e-learning platforms...
 - BigRead.ai – An adaptive reading platform
 - Twee – An AI tool for teachers to create tailor-made tasks for students
 - Diffit - An AI tool for teachers to create tailor-made tasks for students
 - Khan Academy – Self-paced lessons and exercise available
 - Duolingo – A language learning site; bite-sized lessons for learners

5. Limitations of and concerns about the use of AI

Limitations of and concerns about using AI

- **We have explored some powerful AI tools that can be used in learning and teaching English.**
- **What might be some limitations of adopting AI in English learning activities for students?**
- **What are some concerns about using AI?**

Limitations of and concerns about using AI

Regarding ethical use of AI

- For example, to what extent do we respect intellectual property right and data privacy?
- What are some possible risks on the Internet (e.g. biased views and accuracy of the data)?
- When we use AI tools in the classroom, how do we also help students learn to use the tools ethically and responsibly?
- How do we cultivate proper values and attitudes in using AI (e.g. avoid over-reliance of AI, avoid internet addiction)?

Limitations of and concerns about using AI

- Some possible targets that we can consider.

5. Key Stage Targets

Key Stage	1 P1 - P3	2 P4 - P6	3 S1 - S3	4 S4 - S6
Literacy Area 1: Use, provide and communicate information effectively, ethically and responsibly	<ul style="list-style-type: none"> ● Have a basic understanding of Intellectual Property Rights (IPR), e.g. understanding what copyright is. ● Become aware of the need for safe, proper and healthy use of the Internet and electronic devices. ● Become aware of the reasons for and means of sharing information. ● Become aware of the importance of safeguarding personal privacy online and offline. ● Become aware of the impact of cyberbullying on oneself and others. ● Have a basic understanding of the impact of Internet addiction on oneself and others. 	<ul style="list-style-type: none"> ● Know about and practise the codes of IPR and data privacy. ● Have some knowledge of citations and referencing. ● Recognise the need to protect oneself on the Internet (e.g. declining inappropriate invitations on social media). ● Understand the importance of safeguarding personal privacy online and offline. ● Understand the ethical consequences of information sharing. ● Understand the adverse effects of cyberbullying, including doxing, spreading rumours and attaching pejorative labels, be able to suggest ways of tackling cyberbullying and refrain from initiating and participating in such acts. ● Understand the signs of Internet addiction and be able to manage oneself to achieve digital well-being. 	<ul style="list-style-type: none"> ● Become aware of the legal, social and ethical responsibilities in using IT, including IPR (e.g. copyright, freeware, Creative Commons and plagiarism) and data privacy. ● Apply IT ethically to information searching (e.g. knowing how to search for pictures in the public domain or licensed pictures in Creative Commons) and processing with good knowledge and practice. ● Know about and make use of different publication platforms. ● Be able to use citations and referencing in relevant learning activities. ● Be able to suggest ways of safeguarding personal information online and offline. ● Know about the adverse effects of cyberbullying on victims' psychological health and the legal consequences that bullies may face. ● Be able to suggest ways of tackling Internet addiction at the personal level to achieve digital well-being and use IT properly. ● Be able to manage digital footprints. 	<ul style="list-style-type: none"> ● Understand the legal, social and ethical responsibilities in using IT, including IPR (e.g. copyright, freeware, Creative Commons and plagiarism) and data privacy. ● Know about and make use of different social media platforms. ● Know how to share information without infringing on others' rights (e.g. using correct academic practices in quoting, citing and paraphrasing information of others). ● Understand and be able to apply IT skills to process information ethically and with a reflective mindset. ● Respect the privacy of others and handle their personal information ethically. ● Know about the adverse effects of cyberbullying on victims' psychological health and the legal consequences that bullies may face. ● Be able to suggest ways of tackling Internet addiction at the personal level and influence others positively to achieve digital well-being and use IT properly.

Limitations of and concerns about using AI

- Some possible targets that we can consider.

Key Stage	1 P1 - P3	2 P4 - P6	3 S1 - S3	4 S4 - S6
Literacy Area 9: Recognise the ethical issues arising from the application of emerging and advanced information technologies*	<ul style="list-style-type: none"> • Become aware of the application of information technology products in daily life. 	<ul style="list-style-type: none"> • Recognise the applications of emerging and advanced information technologies in daily life (e.g. simple IoT and AI applications). • Understand some simple examples of the positive and negative influences of emerging and advanced information technologies on people's lives. • Refrain from unethical use of emerging and advanced information technologies. 	<ul style="list-style-type: none"> • Recognise the applications and benefits of emerging and advanced information technologies in social, educational and professional contexts (e.g. recognise the applications and benefits of AI in smart home systems, knowledge creation and artistic creation). • Understand and identify the ethical issues arising from emerging and advanced information technologies (e.g. cyber security and privacy concerns of IoT and big data, consequences of excessive dependence on technology, potential concerns regarding academic integrity and copyright due to improper use of generative AI). • Be able to suggest ways to avoid unethical use of emerging and advanced information technologies. 	<ul style="list-style-type: none"> • Understand the latest developments and applications of emerging and advanced information technologies, and reflect on the pros and cons of their use. • Understand and identify the ethical issues arising from emerging and advanced information technologies (e.g. AI bias, deepfakes, moral reasoning by AI machines, AI chatbots, algorithm bias and AI bots disseminating fake news). • Understand the liability for the use of emerging and advanced information technologies.

[Note: *In the planning of Literacy Area 9 in Key Stages 3 and 4, schools are advised to ensure that the content of which is complementary to the IT-related curricula so that students are introduced to the basic concepts of emerging and advanced information technologies (e.g. AI and big data) in relevant lessons before having discussions on the ethical issues arising from these technologies.]

Limitations of and concerns about using AI

Some suggestions

- **(1) Consider what, when and how to use AI tools**
 - Careful lesson / unit planning, making professional judgement when using materials generated by AI
 - The choice of which AI tools to use and which not to use depends on the cognitive demand on students.
- **(2) Address ethical issues related to use of AI**
 - When AI tools are introduced to students, try to leave some time for addressing ethical issues (promoting reflection).
 - Teachers can also use activities to teach students differentiate facts and opinions, encourage them to do 'fact-check', and teach the concept of copyright.

Limitations of and concerns about using AI

Some suggestions

- **(3) Encourage students' goal setting and self-planning (elements of self-directed learning), and handle potential issues of over-reliance**
 - Students think why and how they use AI in a unit.
 - Teachers guide students to use AI tools wisely and purposefully.
- **(4) Encourage students' self-reflection**
 - Guided or facilitated by teachers, students can consider the affordances and constraints of AI.

6. Conclusion/ Q&A

Concluding remarks

- **AI tools are potentially helpful in enhancing students' English learning, but teachers need to use these tools professionally in their teaching, or in supporting students in their learning.**
- **With careful planning, AI can also facilitate self-directed learning within and beyond the classroom.**
- **Putting AI and self-directed learning together also addresses some ethical considerations in using AI - Students need to be aware of how best they can use these tools properly.**
- **The world is changing fast. The AI tools shown today are only some examples, which could evolve the next day to cover more (or fewer) functions. There could also be other AI tools that come to existence. However, the values and attitudes of using AI will always be important.**

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