

What is Generative Artificial Intelligence (GenAI) and how can we tap its opportunities whilst mitigating its risks?

What is Generative AI (Gen AI)?

What opportunities does it present?

*‘Artificial intelligence (AI) is **rapidly changing** the way **children and adolescents play, communicate, and learn**. While it has potential to help solve complex problems, **AI presents both significant opportunities and notable risks concerning child well-being**’ – ¹UNICEF (2023)*

While AI is a type of technology that allows computers to perform tasks that usually require human thinking, Gen AI is a type of AI that is probabilistic and predicts the most likely answer.

GenAI presents opportunities for learning:

- Supports learning through personalised and instant feedback
- Assists with ideation
- Provides an avenue to improve digital literacy, critical thinking, and problem-solving skills

What are the limitations and potential risks of GenAI?

We recognise that GenAI might pose risks, especially when it is not used effectively:

- May give inaccurate or biased answers
- May create tendency for over-reliance when overused
- May pose risks if personal information is shared
- Probabilistic and predicts the most likely answer - it can sound confident even when it is wrong
- Responds like a person, but it does not truly understand or experience emotions.



About 1 in 2 teens would trust AI-generated news story to the same extent or more than one written by a human.²

¹Common Sense (2025), *Nearly 3 in 4 Teens Have Used AI Companions, New National Survey Finds*, <https://www.common sense media.org/press-releases/nearly-3-in-4-teens-have-used-ai-companions-new-national-survey-finds> (accessed on 23 October)

²UNICEF, *The risky new world of tech's friendliest bots AI companions and children*, <https://www.unicef.org/innocenti/stories/risky-new-world-techs-friendliest-bots>

³Parents, *More Kids Are Turning to AI Companions—And It's Raising Red Flags* <https://www.parents.com/more-kids-are-turning-to-ai-companions-and-its-raising-red-flags-11790959#toc-how--why-kids-are-using-ai-companions-today>

How should children interact with GenAI?

Parents should discourage your children from relying on AI Companions for social-emotional support, as this may pose challenges for their development:

- Children can become attached to AI Companions (e.g. chatbots) as trusted friends however this interaction poses a number of concerns.
- It blurs the line between fantasy and reality and makes it harder to distinguish good advice from bad advice.
- Overuse of AI may limit opportunities for face-to-face communication, the development of one's empathy and emotional regulation.
- Over prolonged use, children may lack key socio-emotional competencies and struggle with real-world interactions³.



About 1 in 3 teens use AI companions for social interaction and find them as satisfying or more satisfying than those with real-life friends.¹

¹Common Sense (2025), *Nearly 3 in 4 Teens Have Used AI Companions, New National Survey Finds*, <https://www.common Sense Media.org/press-releases/nearly-3-in-4-teens-have-used-ai-companions-new-national-survey-finds> (accessed on 23 October)

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How will your child use AI to learn in school?

Find out how your child will use AI to learn and develop AI literacy through the school curriculum

Students will use GenAI to learn in an age-appropriate manner



Scan QR code to read more about SLS AI-enabled features!

1. AI use for teaching and learning must be **age- and developmentally-appropriate**.
 - **Pri 1 to 3 students** will mainly engage in hands-on experiences, with **little or no** direct use of AI tools.
 - **Pri 4 to 6 students** will use AI tools occasionally with teacher supervision in class to support their learning.
2. There are safe and pedagogically sound AI tools available in the Singapore Student Learning Space (SLS). Students will use these tools when their teachers incorporate these tools within the assigned SLS modules.

Three AI-enabled systems in the Singapore Student Learning Space (SLS):

AI CAN MEANINGFULLY TRANSFORM TEACHING AND LEARNING

MOE harnesses Artificial Intelligence (AI) as a strategy¹ to achieve the desired student outcomes, empowering self-directed learning and customising students' learning experiences.

Three AI-enabled systems are now available on the Student Learning Space (SLS):

- Adaptive Learning System
- Teaching and Learning Assistants
- Learning Feedback Assistants

FIND OUT MORE ABOUT THEM ON THE NEXT PAGE >>>

¹ The National AI strategy announced in November 2019 outlined a plan for Singapore to deepen our understanding and use of AI technologies to improve lives. MOE's Ethical Plan also guides the development of these AI systems for learning.

GREATER CUSTOMISATION OF LEARNING

- **Adaptive Learning System (ALS)** provides personalised learning pathways to enable students to learn at their own pace.
- **Teaching and Learning Assistants (LEA)** guides students, self-directed learning through dialogue and iterative questioning based on curated learning materials in its knowledge base.

I can correct my own errors... click to hear more!

SUPPORTING TEACHERS' PROFESSIONAL PRACTICE

Teaching and Learning Assistants support teachers by automating routine tasks, analysing student responses, and enhancing lesson design. Tools like **Authoring Copilot (ACP)** help teachers generate lesson ideas and activities, while **Data Assistant (DAT)** allows teacher to quickly analyse students' open-ended responses to enable timely and targeted interventions. These tools enable teachers to focus on designing more effective and personalised learning experiences.

ALS helps me learn at my own pace... click to hear more!

PERSONALISED FEEDBACK FOR LEARNING

Learning Feedback Assistants (LFAs) provide timely and targeted feedback across different subjects, helping students identify and correct their mistakes. They support the development of writing and oracy skills, content understanding, as well as problem-solving skills, while enabling teachers to focus on guiding students in deeper learning and higher-level thinking.

Students will develop AI literacy throughout primary school

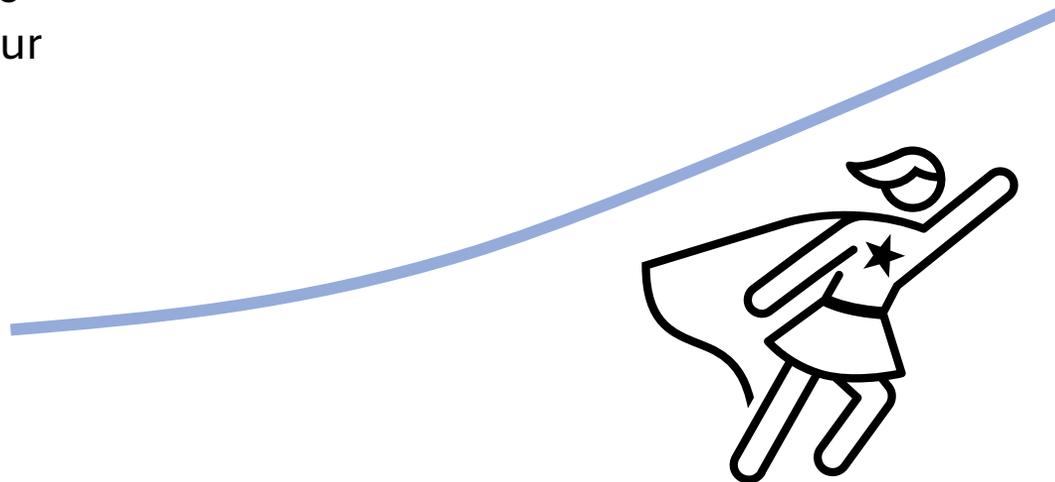
- Under MOE's National Digital Literacy Programme (NDLP), students will develop **9 digital competencies** under the **Find, Think, Apply, Create (FTAC)** Frame. (Scan QR code on the right)
- Students will develop AI literacy over their educational journey.



To access information on MOE's NDLP



Lower primary students will learn to recognise that AI is present in our daily lives



Upper primary students will learn about the risk of misinformation from AI output, that AI output may contain false information, and how some AI features (e.g. those in SLS) can support learning in a safe digital environment

‘Code For Fun’ Programme

- All upper primary students will go through the “Code for Fun” programme which includes an introduction to emerging technologies (e.g. AI) so that students understand how AI learns using data and can appreciate the benefits, risks, and limitations of using AI. (Scan QR code on the right)
 - **Code For Fun (P4 students) - Term 2 Week 4**
 - **AI For Fun (P6 Students) - Post PSLE**
- A notification will be sent to parents via Parents Gateway closer to the date.



Primary 1 to 3

How will your
child use AI for
his/her
learning?

Our Approach

At the Lower Primary level, the **use of AI is not encouraged**. Our priority is to help students build strong foundational knowledge and skills to achieve independent mastery.

Student Exposure to AI

Students' exposure to AI is very minimal and only takes place in teacher-guided classroom contexts.

For example, during a writing lesson, students may use the image generator feature in Padlet to support idea brainstorming. In such cases, AI is used as a supporting tool under close supervision, and not as a substitute for students' own thinking or work.

Primary 3 – AI Awareness (SLS Module)

At Primary 3, students are assigned an SLS module that introduces:

Basic AI concepts

How AI appears in daily life

Primary 1 to 3

How will your
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learning?

WHAT IS AGE-APPROPRIATE USE OF AI?

Schools are given guidance on the age-appropriate use of AI. These guidelines are informed by learning sciences.

P1 to P3

Concrete, hands-on learning experiences, and social interactions should be prioritised to allow students to build foundational knowledge, cognitive and social skills, and human relationships.

- *Direct use of AI tools by students is not advisable as students may not be able to discern the output and may mistake AI as human*

P4 to P6

The use of AI could be **gradually introduced to students** under the guidance of teachers.

- *When using chatbots, students should be supervised and guided to discern the output as they develop in their ability to be safe and responsible users of AI*

Sec

There should be a gradual release of responsibility to **allow for independent use of AI**, so that students learn to use AI to support learning while **not over-relying on it**.

- *Students will be given opportunities to reflect on their use of AI so that they develop into confident and ethical AI users*

Pre-U

As **students become more empowered to use AI as a collaborator**, emphasis on the use of AI in a **safe, responsible, and ethical** manner continues.

- *Students will be given opportunities to innovate with AI and reflect on their use to guard against misuse of AI*

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Primary 4 to 6

How will your
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learning?

Our Approach

Students ***are guided on the use of some AI tools and will be supervised.***

Clear expectations are set on the responsible use of AI, especially for assignments.

Building AI Literacy (Upper Primary)

P4 to P6 students complete a **compulsory AI module in SLS.**

P6 students participate in the **“AI for Fun” programme** as part of their post-PSLE activities.

Supervised AI Experiences

Teachers may guide students in interacting with chatbots in class.

These interactions are closely supervised and monitored.

Students may use AI-enabled features within SLS, such as:

- Learning Assistant (chatbot-like support)
- Adaptive Learning System (ALS) for Mathematics
- Automated feedback features

Our priority remains ensuring that students become confident, independent learners, while developing the awareness and skills to use technology responsibly.

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How Can Parents Partner Up with Schools on the use of AI & Edtech?

3 areas we can work together on to foster School-Home Partnership

1 Respectful Communication

Our children do best when schools and parents work hand in hand to support them.

2 Role Models

3 Real Connections



Respectful Communication

Listen, understand, and foster kind words and actions between you and your child



Have regular and genuine conversations with your child

- to better understand what they do online,
- how to stay safe,
- how to use technology in a responsible manner.

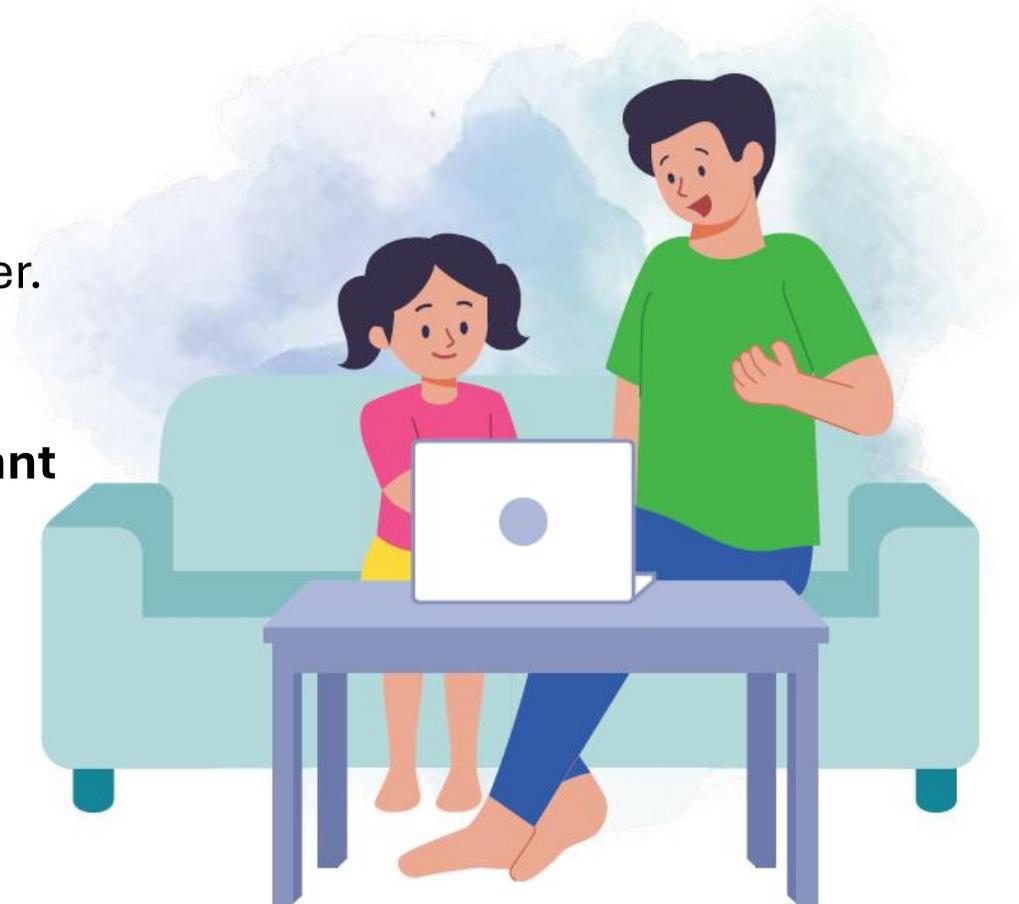


Communicate your actions and rationale.

- Let your child know **you care for them** and **want them to be safe online.**



Discuss with your child as you set parental controls to manage device use and stay safe online.



Role Models

As parents/guardians, you play a significant role in helping your child establish healthy digital habits, and learn to use technology in a positive and meaningful way.



Role model healthy use of devices and social media and good online behaviour for your child/ward

- E.g. parents/guardians not using devices during mealtimes, respectful online communication



Role modelling respectful conversations –

- Parents are in the best position to role model these skills through daily interactions with your child.
- **Listen to understand**, instead of listening to give advice and offer solutions.



Real Connections

Cultivate strong relationships and healthy habits in this digital age



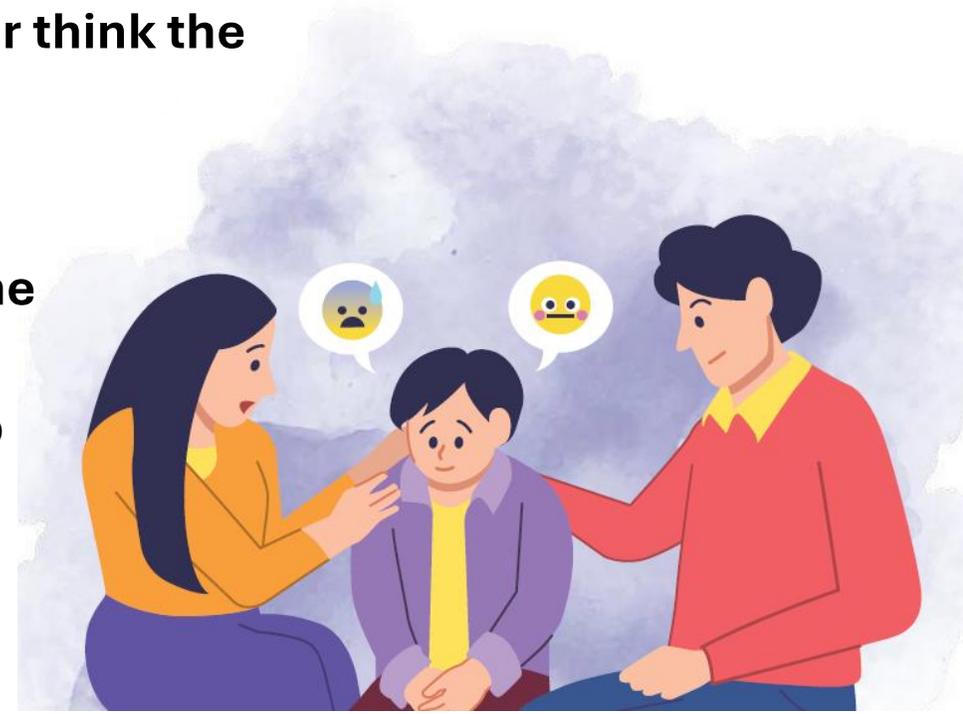
Provide a safe space for conversations

- Children may hesitate to share their true thoughts and feelings with their parents, as they may fear being judged or misunderstood.
- You can let your child know that it is **normal to feel or think the way they do**, and that **they can feel safe** expressing themselves with you.



Provide a balanced mix of engaging online and offline activities, at school and at home

- **Discuss and develop a timetable** with your child to moderate their time spent on screens.
- **Parental control settings** can be used to monitor and limit screen time as agreed with the child.



For age-appropriate AI –guidelines and tools, explore the following resources:



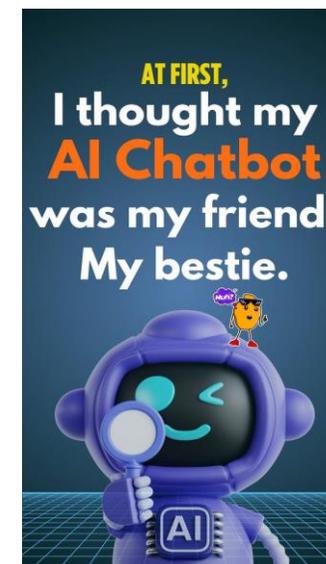
Using GenAI tools for Learning: A Parent's Guide

Parents who wish to learn more about generative AI and how they can support their child's responsible use of such tools can view [this resource](#).



AI & Your Child Should parents guide or guard against AI?

Parents can view [this resource](#) to learn more about the guidelines for age-appropriate use of AI.



“Is AI Chatbot My Friend” Knowgets Video

Parents can view [this video](#) with their child to learn more about the dangers of being emotionally dependent on AI Chatbots.

Other Useful Resources

Want to know more?

Additional Resources

SLS Onboarding Module for P1 Students



[SLS Onboarding Module for P1 Students](#)

SLS Onboarding Module for P4 Students



[SLS Onboarding Module for P4 Students](#)

Parents can encourage their child to go through the SLS onboarding module (for P1 and P4 students) which supports their child in learning how to use SLS to support his/her learning.



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Follow us on Instagram for bite-sized and actionable parenting tips to tackle the everyday demands of parenting.

