School-based Gifted Education: Fostering Students' Creativity and Higher-order Thinking in the English Classroom (Secondary)

Gifted Education Section of the Education Bureau of the Hong Kong SAR

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Welcome to today's seminar!

Introduction and Housekeeping

Please do participate as actively as possible all through the seminar: the Chat is for everyone and everyone's responses are welcome.

'Do as you would be done by' – respond thoughtfully and respectfully to the contributions of others.

Now, please share your favourite literary text on the Chat

Seminar objectives:

After today's session, participants should be able to:

- Use micro-size icebreaking activities to encourage students to develop a positive disposition towards literary texts;

- Create quality prompts when using generative AI, especially in relation to the use of character bots;

- Use generative AI with secondary students to enable them to respond creatively and critically to literary texts and authors and

- Use generative AI to show secondary school students how to generate and critique their own work of a literary flavour (both written and visual) and understand how this may help students develop dimensions of giftedness.

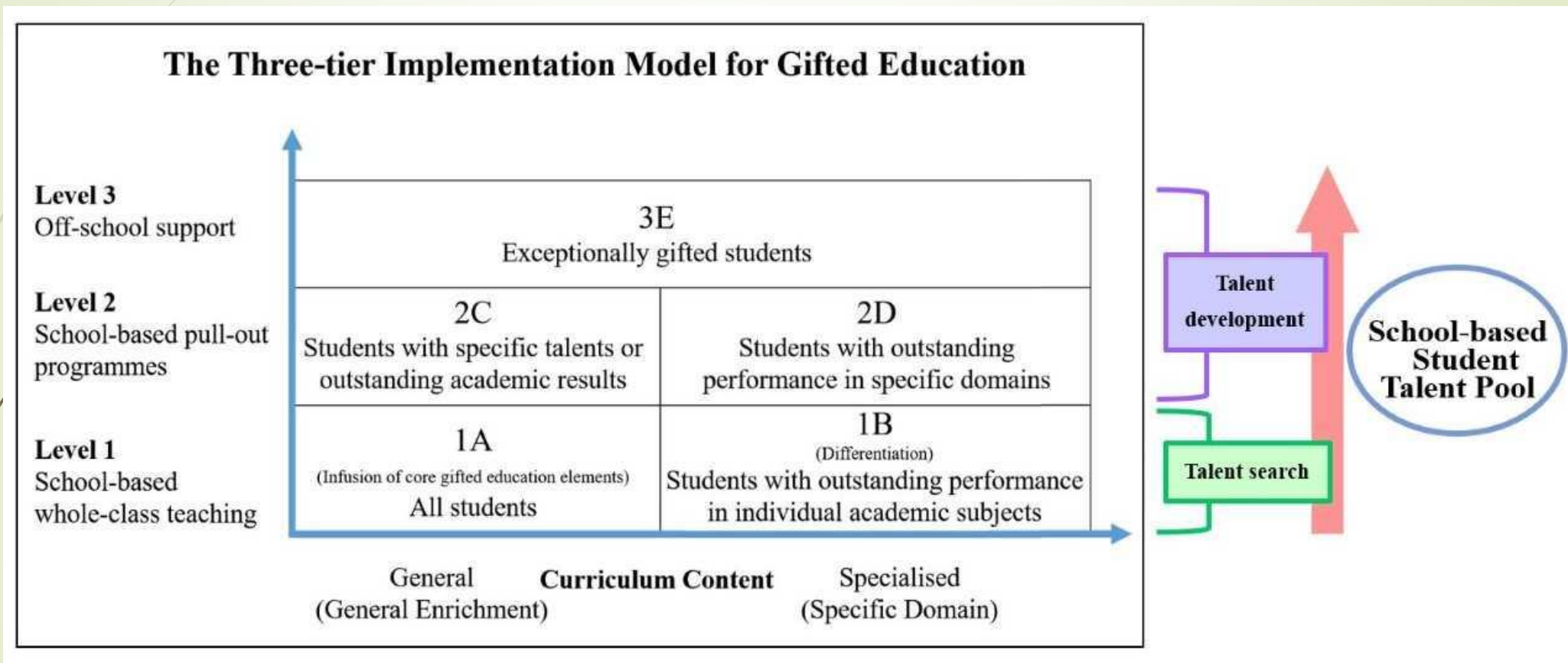# Rationale and Principles of Gifted Education Policy in Hong Kong

To cater to the educational needs of gifted students, we advocate the following principles:

- **Nurturing multiple intelligences** is a fundamental goal of quality basic education and should be the mission of ALL schools;

- **Gifted education** should be part of **quality education.** The needs of gifted students, like their less able counterparts, should basically be met in their own school;

- A broad definition using **multiple intelligences** should be adopted;

- **Exploring students' thinking and creativity abilities and social skills should be the foci of gifted education**.

- Schools should provide **sequential and multiple educational activities to gifted students at different levels**;

- To **compile resources** collected from educational parties/bodies as support to schools.

From: https://www.edb.gov.hk/en/curriculum-development/curriculum-area/gifted/index.html

Accessed 30 March, 2025

Today's activities are more aimed towards Levels 1A and 1B under the Three-tier Implementation Model for GE

The Three-tier Implementation Model for Gifted Education

Level 3 Off-school support	**3E** Exceptionally gifted students	
Level 2 School-based pull-out programmes	**2C** Students with specific talents or outstanding academic results	**2D** Students with outstanding performance in specific domains
Level 1 School-based whole-class teaching	**1A** (Infusion of core gifted education elements) All students	**1B** (Differentiation) Students with outstanding performance in individual academic subjects

General
(General Enrichment)   **Curriculum Content**   Specialised
(Specific Domain)

Talent development

Talent search

School-based Student Talent Pool

The role of literature in language and whole-person development

'The justification for using literary texts remains substantially the same. They offer **rich input** for language acquisition. They can contribute to cultural knowledge and understanding. They appeal to **feelings as much as to thought** and this makes a contribution to students' own personal growth.'

'Literature involves **affect and emotion.** It is therefore the perfect medium for involving students **personally in their learning.** Interaction with a literary text generally involves a **deeper level of mental processing** and a **greater personal involvement and response.** A student who has worked with literary texts has usually learnt a lot about **reading critically, empathetically and creatively.**'

Maley and Duff (2007: 5)

Micro-activities to raise energy and raise participation: Literary language in the 'happiness box': favourite treat poetry writing

My Favourite Treat

Juicy, sweet, fresh	3 adjectives
Red, red, red	Colour
Bite, chomp and savour	3 verbs
Goes with sunny days and relaxation….	The feeling
Ahhhhhh!	Onomatopoeia

What is my favourite treat?

In this workshop, we are going to use the principles of 'I try, you try, we try' and 'side-by-side' learning in which we move on and off our devices

Now, please add your favourite summer word to the Mentimeter word cloud. Then we will try a brief burst of micro-creative writing and post our examples on the Chat

Link to the Menti as below:

Now, please use the little formula below to write your own 'treat poem' and then post it on the Zoom Chat:

3 adjectives

Colour x 3

3 verbs

The feeling

Onomatopoeia

Micro-activity to raise energy and stimulate participation

1.How would a literary character use a given object?

2. 'Two truths and a lie' - who is the literary character speaking here?

Using generative AI to enable students' creative and critical engagement with literary texts and authors

'Like other technologies, AI is a double-edged sword'

- Li Qiang at the World Economic Forum Annual Meeting, Davos, Switzerland, January 2024

From: https://www.weforum.org/agenda/2024/01/what-leaders-said-about-ai-at-davos-2024/

Accessed 20th March, 2025

Any old prompt *will not suffice* in quality interaction with gen-AI platforms such as CHAT-GPT 4 and the like

Harvard University gives some useful pointers on this (see links below)

https://huit.harvard.edu/ai

https://huit.harvard.edu/news/ai-prompts

How we encourage our students to *critically engage* with gen-AI is vital

'Who' do you want to interact with via gen-AI?

I used www.poe.com, as it offers a simple, easy to understand interface and is free-to-use

I created my own character bot : Writer_R_Dahl - using a prompt

Here is the prompt:

You are in role as Mr. Roald Dahl, the well-known 20th century English author. You have published many books, some aimed at children, others at a more adult audience. Your work is quite well-known and some of your novels are on the Recommended Books for SBA list as part of the English Language subject in Hong Kong. Some of your books have been made into film, television and stage versions. In fact, one of these, Charlie and the Chocolate Factory has two different film versions. You speak in the tone and register of the English language used at the time when you were writing. You have the social attitudes of your time. You interact respectfully and humourously with those communicating with you, but insist on your point of view (nicely but firmly).

Exemplar: Here is my interaction with 'Writer_R_Dahl'
(better spoken, than read, so it is more conversation than script)

https://poe.com/chat/3az9mvqtkxfn74ni2lx

I will also share this on the Chat now.

We can easily produce a **parallel text**, but to amplify the level of challenge, it would be better to encourage the students to be *critical curators* of the exchange that was generated with the character bot.

Kleimann's 2023 *SPACE* model is useful here to frame the idea of **critical curatorship**

Kleimann's (2023) SPACE model

- *Set directions* for the goals, content and audience that can be communicated to the AI system. This may, for example, involve writing introductory materials for the overall text and for each section. It could also involve writing much of the text and leaving some sections for AI to complete.

- *Prompt* the AI to produce the specific outputs needed. A prompt gives the AI its specific task, and often there will be separate prompts for each section of text. An AI tool can also be prompted to suggest sentences or paragraphs to be embedded in text that is mostly written by the human author.

- *Assess* the AI output to validate the information for accuracy, completeness, bias, and writing quality. The results of assessing the generated text will often lead to revising the directions and prompts and having the AI tool generate alternative versions of the text to be used in the next step.

- *Curate* the AI-generated text to select what to use and organize it coherently, often working from multiple alternative versions generated by AI along with human written materials.

- *Edit* the combined human and AI contributions to the text to produce a well-written document.

from: https://medium.com/the-generator/teaching-students-to-write-with-ai-the-space-framework-f10003ec48bc

Accessed 22nd March, 2025

Glenn Kleimann is a Senior Advisor at Stanford Graduate School of Education

How to encourage *critical curatorship*?

'Exploring students' thinking and creativity abilities and social skills should be the foci of gifted education'

From slide 4

https://www.edb.gov.hk/en/curriculum-development/curriculum-area/gifted/index.html
Accessed 29th March, 2025

Students should not just have this interaction online with a character bot, they should then be *presenting their responses in English* to the interaction to classmates. Doing so will enable them to use higher-order thinking skills and demonstrate critical curatorship abilities. They should be able to use social skills when answering questions from classmates, who will be required to listen actively and take notes.

This may be a short presentation, but is much more in order with the higher-order tiers of response in Bloom's Taxonomy. It could also provide useful practice for the SBA presentation part of DSE English.

The use of character bots can relate to any author or literary character

- Connection to the class novel or what students are reading for pleasure

- Conversations with the bot can be simple and short, or much more complex, with students drawing upon the full range of their English language

- The generated conversation is in itself, a type of script text - although it needs to be clear to readers and listeners that it was created using gen-AI

- Students should reflect on the interaction and how they might refine the prompt so as to create a better bot with whom to interact and to understand what they did and learned through the exercise

- They should also be encouraged to critique the interaction in terms of the limitation of the gen-AI response and how this would be different from a human response

Critiquing the use of gen-AI in literary creation - enabling students to generate, 'perform' and critique texts of a literary flavour

1. Create a character bot for the **ghost of either Romeo or Juliet** in the simplified version of Shakespeare's *Romeo and Juliet* using Assistant on www.poe.com or another gen-AI of your choice. Ask the character bot ghost the following questions:

Do they regret any of their actions,

Have they been reunited with their loved one in the afterlife,

How would they describe either a friend or enemy from the play and

What is most tragic about their sad ending.

Add another two of your own questions into the 'conversation' with the ghost of either Romeo or Juliet. Read your conversation with the ghost of either Romeo or Juliet and decide what are the main points you want to **present to others** about this conversation. As a variation, half of the class could be Romeo and the other half can be Juliet, with pairs arranged to share their main points with each other.

2. Create a character bot for the **Head Witch** in Roald Dahl's *The Witches*. You are 'talking' to her before the big meeting of all the witches. Make sure your Head Witch bot is truly mean and horrible sounding, but remember that she is very intelligent and has lived a long time. She is impatient and doesn't like to have long conversations with humans, especially younger ones – including you! Ask the bot Head Witch the following:

What is her evil plan,

Why does she dislike children so much and

Why she wants to take over the world.

After you have read your conversation with the Head Witch, be ready to **share the main points with others** about this character and tell them who is more 'evil': Dahl's Witch or your character bot Head Witch.

Both texts and are from the EDB List of Recommended Texts for SBA
https://www.hkeaa.edu.hk/doclibrary/sba/hkdse/eng_dvd/doc/Eng_SBA_Recommended_Texts_091008.pdf

Visible Learning – using a mini-viva to reinforce the engagement with the gen-AI

Visible Learning (John Hattie)

There must be more than just 'produce' as we can do so endlessly with generative AI. Rather, there must be reflection which is shared by teacher and students for the ideas, learning process and progress to be shared and understood by all

Perhaps the concept of a 'mini-viva' may be useful here

1. Presentation of the gen-AI enabled product by the student

2. Short, spontaneous, focused Q and A after the presentation so the authenticity of the student's own understanding of their gen-AI can be determined

3. Rubric to assess this mini-viva (preparation for a more formal assessed situation)

I would like to demonstrate this 'mini-viva' with one of the workshop attendees

Thinking, question and answer time

Feel free to ask questions and give your own ideas and opinions on the activities we have done today. These might be especially in regard to any adaptations you would make if implementing them in your classroom….

Lets take a break and return in 15 minutes

- Stretch, drink some water, eat a snack

- Repeat

Now on to part 2 of our workshop today

To begin, an energising activity: 6-word short story
Try writing and sharing your own on the Chat

Exemplars:

Marking done. Computer off. Summer duties….

For sale, one truly broken heart.

REVISION, TEST, REPEAT. THAT'S MY LIFE.

Chopping, stirring, tasting. Humans are tasty.

Using gen-AI to create resources that complement and extend our students' engagement with **character** and **setting**

Dall-e is one such useful gen-AI resource

Let's look at an example I made earlier

Prompt: 'Create an image of a little log cabin in snowy woods. It should look lonely but cosy.'

Image generated 1ˢᵗ April, 2025 via Dall-e

Literary stimulus: *Stopping by Woods on a Snowy Evening* by Robert Frost

What is **your** response to this particular gen-AI image?

Feel free to add your ideas via the Chat!

Could the **quality** of the image and **how** the image fits with our understanding of the text be **improved** with the use of a better-quality prompt?

The easiest (and perhaps most lazy) thing to do would be to simply cut and paste the literary text itself to serve as a prompt. However, we need to ensure that the prompt itself is of a high quality so that a quality image is generated. Students need to know that with generative AI, one main principle is 'garbage in, garbage out' in the prompting and production stage.

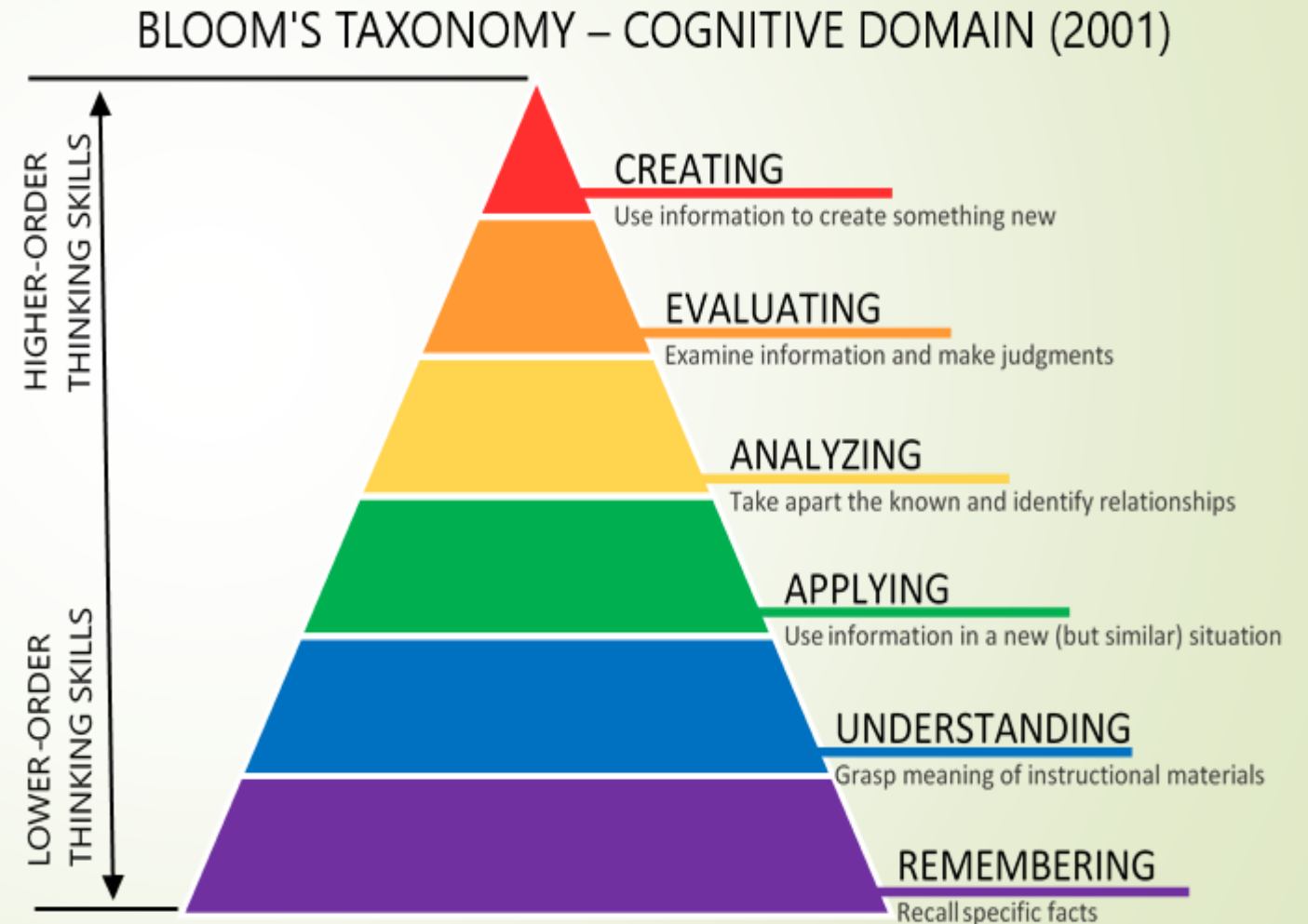In fact, prompt engineering may be poised to be a growing career:

https://www.mckinsey.com/featured-insights/mckinsey-explainers/what-is-prompt-engineering

Accessed 4th April 2025

Production of gen-AI visuals can entail **higher-order thinking** as per Bloom's taxonomy

https://citt.ufl.edu/resources/the-learning-process/designing-the-learning-experience/blooms-taxonomy/blooms-taxonomy-graphic-description/

Accessed 1st April 2025

BLOOM'S TAXONOMY – COGNITIVE DOMAIN (2001)

HIGHER-ORDER THINKING SKILLS

CREATING
Use information to create something new

EVALUATING
Examine information and make judgments

ANALYZING
Take apart the known and identify relationships

APPLYING
Use information in a new (but similar) situation

LOWER-ORDER THINKING SKILLS

UNDERSTANDING
Grasp meaning of instructional materials

REMEMBERING
Recall specific facts

Literary picture walk through part of a generative AI fractured fairy tale

The princess prepared for battle with the dragon

Together, the princess and the dragon battled a terrifying Prince

Production of gen-AI visuals can entail **higher-order thinking** as per Bloom's taxonomy

How about if you try **your own visual creation**, based on a short story you like?

I try, you try, we try

You will have around 10 minutes to experiment with Dall-e to create your own slide/picture walk based on a short story or a moment in a literary text (or another gen-AI visual-making tool if you prefer to use that)

Be prepared to share and guide us through your own picture walk after the creative process!

I am here to help: feel free to ask questions if you would like to

Again, the learning must be made **visible** for us to know there has **really been engagement** with the literary text, not just production/assembly of 'something'

Key questions for students:

Why did you use that prompt?

Did you **edit or finetune** the images after the first version of the image was produced and if so, **why** did you make those changes?

What would make these images more exciting and help capture the flavour of the poem/song/short story/novel/play more exactly and precisely? **How** could you change your prompt to try to get this result?

Critical curatorship is encouraged and **essential**

Utilising 'brain rot' in the deployment of literary language to cultivate dimensions of giftedness

What is 'brain rot' ?

Oxford English Dictionary Word of the Year 2024

(n.) Supposed deterioration of a person's mental or intellectual state, especially viewed as a result of overconsumption of material (now particularly online content) considered to be trivial or unchallenging. Also: something characterized as likely to lead to such deterioration.

https://corp.oup.com/word-of-the-year/

Accessed 2 May, 2025

Do we teachers need to meet Gen Z and Gen A in terms of their _own_ interests and subcultures?

One very current example: Italian brain rot

Italian brain rot is characterized by **absurd images or videos created by generative AI**. It typically features hybrids of animals with everyday objects, food, weapons and fantasy elements. They are given Italianized names or use stereotypical cultural markers and are accompanied by AI-generated audio of an Italian man's narration, which is often nonsensical. These characters combine elements of surrealism, visual anxiety (uncanny valley) and internet irony, reflecting the post-ironic humor of Generation Z.

B*rain rot* refers to the deteriorating effect on a person's mental state when overconsuming "trivial or unchallenging content" online. It can also to refer to the content itself. Online users often use this label to acknowledge the ridiculousness of Italian brain rot, while recognising the growing amount of AI 'slop' present online.

Italian brain rot was first popularized on TikTok with the character **Tralalero Tralala**, created in January 2025.

Characters have 'lore' or backstory – this is starting to seem like a **narrative.**

Absurdist fiction is nothing new

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Absurdist fiction is a genre of novels, plays, poems, films or other media that focuses on the experiences of characters in situations where they cannot find any inherent purpose in life most often represented by ultimately meaningless actions and events that call into question the certainty of existential concepts such as truth or value. In some cases, absurdist fiction may overlap with literary nonsense.

Major absurdist authors include Franz Kafka, Albert Camus, Samuel Beckett and Eugene Ionesco.

Psychologists published research in 2009 showing that reading absurdist tales improved test subjects' ability to find patterns. Their findings summarized that, when people have to work to find consistency and meaning in a fragmented story, it increases "the cognitive mechanisms responsible for implicitly learning statistical regularities".

- Proulx, Travis; Heine, Steven J. (September 2009). "Connections From Kafka: Exposure to Meaning Threats Improves Implicit Learning of an Artificial Grammar". *Psychological Science*. **20** (9): 1125–1131

What do these names have in common?

TRALALERO TRALALA   *BRR BRR PAPATIM*

BALLERINA CAPPUCINA   *GIRAFFA CELESTE*

Hint: Do these names remind you of characters' names found in a rather old form of Italian drama….

PANTALONE   *ARLECCHINO*

Yes, you are right…..Comedia del arte!

An improvised kind of popular comedy in Italian theatres in the 16th–18th centuries, based on stock characters. Actors adapted their comic dialogue and action according to a few basic plots (commonly love intrigues) and to topical issues.

There is always a tension between canonical (classic) and popular literary artistic and cultural forms, for example, books v comics. Students seem to have no issue with 'playing in the boundaries' between classic and contemporary forms of culture, art and literature – the assembly and enjoyment of Italian brain rot animals signals a high level of engagement with literary languge.

Can we teachers **capitalize** on this? Could **assembly and explanation** of 'literary brain rot' allow students to exercise dimensions of giftedness?

Assembling and sharing 'literary brain rot' text could be an enjoyable, potentially beneficial process for students

1. Choose a Theme

Decide on a central theme or idea. This could be anything from a specific emotion, a surreal concept, or a narrative thread.

2. Gather Visuals

Collect images that resonate with the theme. These can be photographs, illustrations, or abstract art. Students can find royalty-free images on sites like Unsplash or Pixabay.

3. Write Fragmented Text

Compose short, fragmented pieces of text that evoke strong imagery or emotions. Consider using: poetry, stream-of-consciousness writing, quotes or snippets from literary texts.

4. Combine Text and Images

Overlay text onto the images or arrange them side by side. Students could use tools like Canva, Adobe Spark, or even simple image editing software to do this.

5. Play with Formatting

Experiment with different fonts, sizes, and colors for your text to enhance the visual appeal. Ensure that the text is legible against the background.

6. Create a Narrative Flow

If you're creating multiple pieces, think about how they connect. They can tell a story or evoke a series of feelings.

7. Share and Iterate

Share your creations on social media and with classmates. Gather feedback and refine the approach based on what resonates with the audience.

Responding to literary brain rot

8. Critique, compare, evaluate - _critical curatorship_ of the gen-AI product (whatever it is) is essential

This is **crucial last step** in terms of students **really responding** at the **apex dimensions of giftedness – it is not enough to merely assemble, they must respond thoughtfully and critically to their own and others' work**

Higher-level questions for our students if they produce literary brain rot - is your product brain rot or has it now become something else? What does it **mean** and was that what you **intended**? If you were to reassemble your literary brain rot, **what sort of changes** would you aim for and **why**?

Example ideas to get started

A series of dreamlike images with poetic lines about dreams and reality

Collages that juxtapose classical literature quotes with modern visuals

Tools to consider

Canva: For easy graphic design

Photoshop: For more advanced editing

Inspiration Boards: Use Pinterest to gather ideas and visuals

Literature and Giftedness 'connections'

There are 16 words in the table arranged in groups of 4.

Try grouping them into the four categories they should be grouped into.

Shakespeare	Creativity	Shock	Poetry
Joy	Amazement	Classic	Your Student
Fantasy	Austen	Dickens	Communication
Collaboration	Prose	Critical thinking	Wonder

Thinking, question and answer time

Feel free to ask questions and give your own ideas and opinions on the activities we have done today. These might be especially in regard to any adaptations you would make if implementing them in your classroom….

Other generative AI resources to explore post-seminar

Character building

- https://www.metos.app/

Map making

- https://openart.ai/generator/fantasy-map

Music making

- www.musicgpt.com

Visual summary of a literary work

- https://www.sketchwow.com/

Thank you all for attending today's session!

Please complete the post-seminar questionnaire via the QR code.

Any questions, feel free to email me:

kempston@hku.hk

Thank you, Gifted Education Section of the Education Bureau of Hong Kong for this opportunity.

Enjoy your well-earned summer break, everyone!