



QAGTC

The Queensland Association for Gifted & Talented Children

# ***Giftedness: Critical and Creative Thinking 2024 Annual Conference***

***Teachers Step Back:  
I think therefore I learn  
I learn therefore I am***

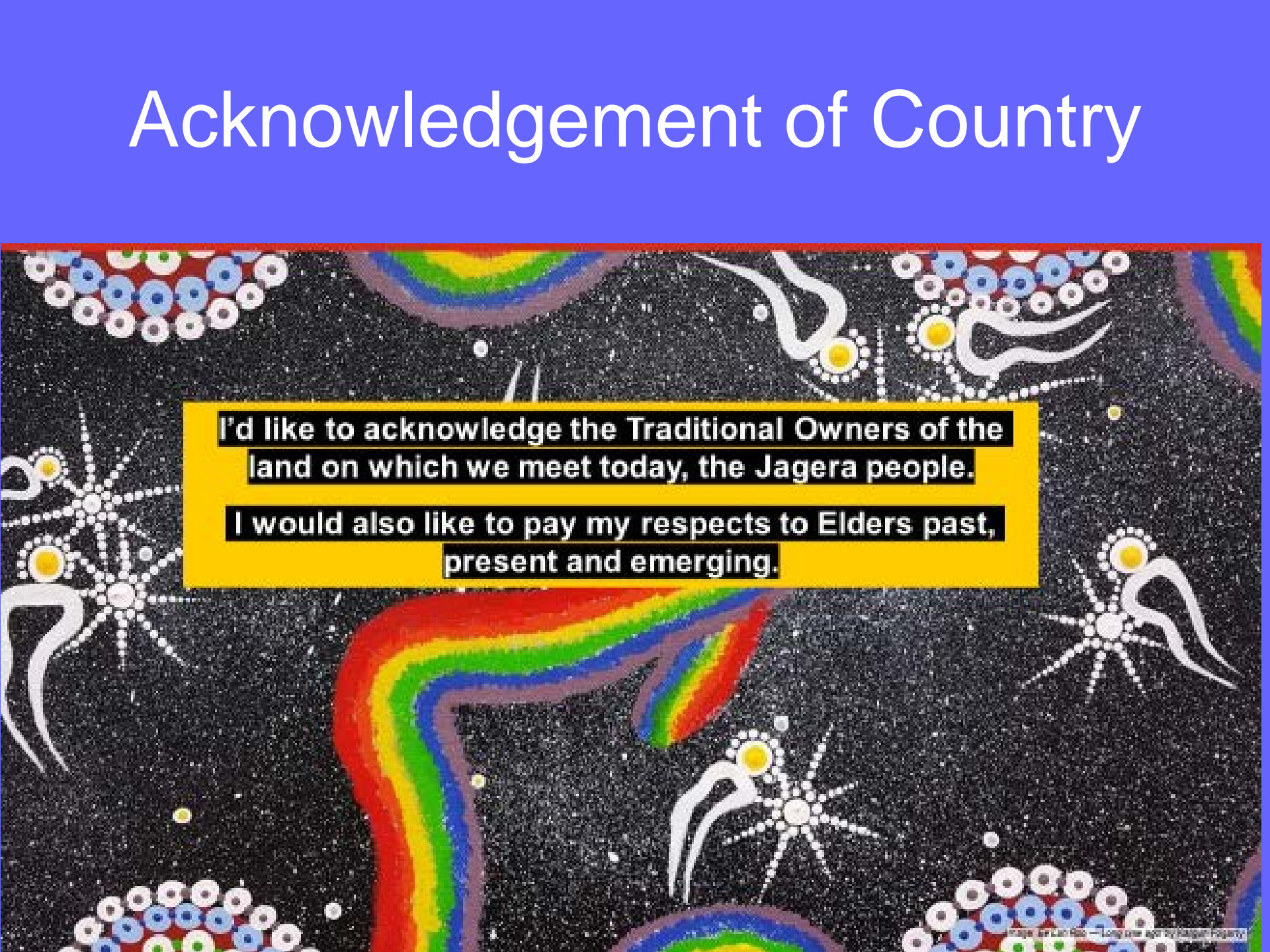
***Presenter:***

***Gail Young***

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***24 May 2024***

# Acknowledgement of Country



**I'd like to acknowledge the Traditional Owners of the land on which we meet today, the Jagera people.**  
**I would also like to pay my respects to Elders past, present and emerging.**

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Welcome

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Teaching students to ask their own  
questions

- ?
- Question
  - Formulation
  - Technique
- ?

- ?
- RQI Right Question Institute
- ?

Former Dean: James E Ryan  
Harvard Graduate School of Education

- “What might happen if all teachers, in addition to asking questions of their students, also deliberately fostered the skill of question formulation in their students.”

# Diversity, Equity, and Inclusion

- The Harvard Graduate School of Education (HGSE) is committed to recruiting, cultivating, engaging, and encouraging a diverse and vibrant community of faculty, staff, and students.





School was a bit of a nightmare for Albert. But back home, he loved diving into a pile of physics and maths books, trying to prove theories on his own. By the time he was a teenager, he had published his first scientific paper!



When Coco finally went to bed, she dreamt in shapes and patterns. She wanted to make so many things!

# *What is the Question Formulation Technique?*



*(QFT)*

*Developed by the Right Question Institute  
Rightquestions.org*

*Is a deceptively simple, practical, adaptable method that helps students become more sophisticated thinkers and problem solvers.*

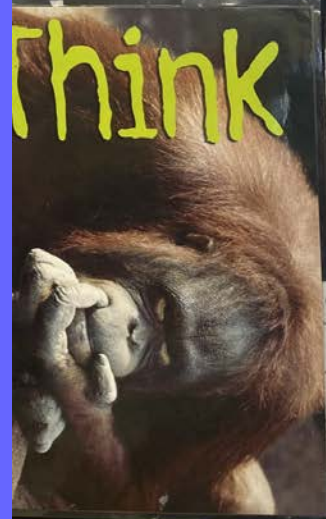




PREP GY

Are a thinking classroom

Thinking!  
This is what I'm thinking about...



Think



Dalton dining snab

Nora Sw

Eddie Weekend



Eddie - I think about the Weekend.

Zac - I think about Eddie going to the hospital.

Robyn - I think about My Mummy coming home.

Lagon - I think about Eddie coming back to school.

Raea - I think about My Buddy.

Jackson - I think about Horse Riding.

Nora - I think about Swimming.

Hattie - I think about Nutrients and Plants.

Filip - I think about My Brain.

Harrison - I think Dino World.

Florence - I think about Going on Holidays.

Adeline - I think about Going to the Beach.

James - I think about A Family of Dinosaurs.

Calvin - I think about Everything.

Toby - I think about Rainbows.

Eli - I think about Turtles and Ducks.

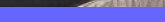
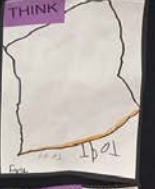
Bella - I think about Going to my birthday in June.

Levi - I think about Playing in the Playground.

Anabelle - I think about going to the Beach.

Alan - I think about Long

Ask a question.  
Make a comment.



zero

Friday Saturday

Developed by the Right Question Institute, the Question Formulation Technique, or QFT, is a structured method for generating and improving questions. It distills sophisticated forms of divergent, convergent, and metacognitive thinking into a deceptively simple, accessible, and reproducible technique.

[rightquestion.org](http://rightquestion.org)

- The QFT builds the skill of asking questions, an essential — yet often overlooked — lifelong learning skill that allows people to think critically, feel greater power and self-efficacy, and become more confident and ready to participate in civic life.

# The QFT, on one slide...

## 1) Question Focus

## 2) Produce Your Questions

- ✓ Follow the rules
- ✓ Number your questions

1. Ask as many questions as you can
2. Do not stop to discuss, judge or answer
3. Record *exactly* as stated
4. Change statements into questions

## 3) Improve Your Questions

- ✓ Categorize questions as Closed or Open-ended
- ✓ Change questions from one type to another

## 4) Strategize

- ✓ Prioritize your questions
- ✓ Action plan or discuss next steps
- ✓ Share

**Closed-Ended:**  
Answered with “yes,”  
“no” or one word

**Open-Ended:** Require  
longer explanation

## 5) Reflect

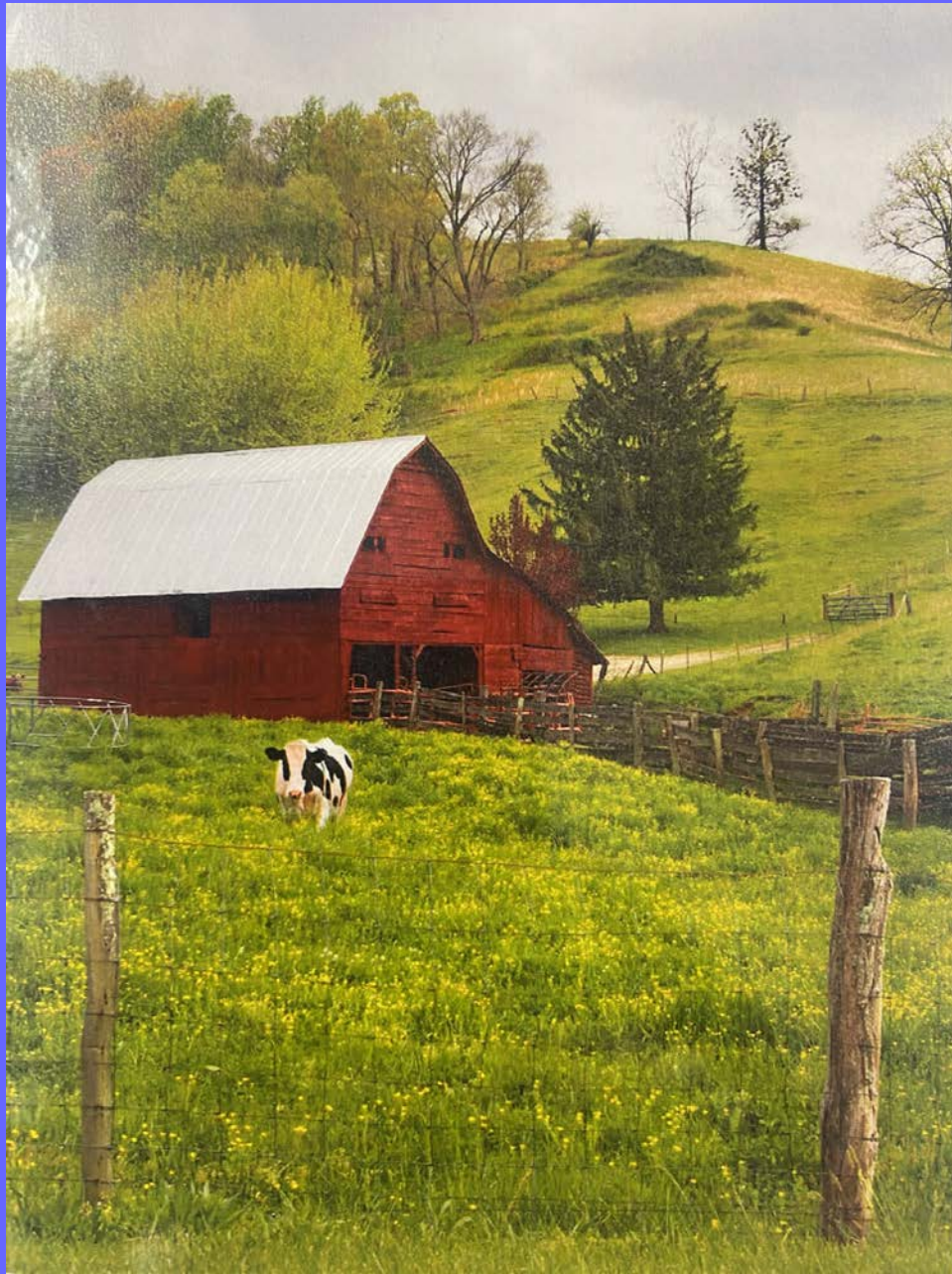
## Steps of the QFT

- The steps of the QFT are designed to stimulate three types of thinking: divergent thinking, convergent thinking, and metacognitive thinking.
- Each step of the process can be a learning experience on its own. But the real power of the QFT comes when all steps — and all three thinking abilities — work together.

# QFocus

## Design a Question Focus (QFocus)

- The QFocus is a stimulus for jumpstarting questions. It is the focus of question formulation. The QFocus may be a statement, phrase, image, video, aural aid, math problem, equation, or anything else that gets the questions flowing. It *may not* be a question, and it should be related to the content or intended learning outcomes. A good QFocus should be simple and clear, and it should encourage divergent thinking.



*The QFocus Stimulus  
Resulting Questions*

*1 Does the cow have a name?*

*2 What is the red house  
there?*

*3 Why is the roof white?*

*4 Can the cow walk?*

*5 Is the cow a baby or grown  
up?*

*6 Why is there only one cow?*

*7 Where are the gates?*



8 *What place is the farm near?*

9 *How long does it take to get to the farm?*

10 *Why are the windows small?*

11 *Is it near a forest?*

12 *Why is the dead tree up the mountain?*

13 *Is it near a park?*

14 *How big is the cow?*

15 *Is the cow boy or girl?*

16 *What is the weather like ?*

17 *How big is the house?*

- 18 *Where is the farmer?*
- 19 *Why is the trampoline there?*
- 20 *What country is the farm?*
- 21 *Why is the cow there?*
- 22 *Where are all the other cows?*
- 23 *Is it is Australia?*
- 24 *Why is a pink tree there?*
- 25 *Are there more animals ?*
- 26 *What does the cow eat?*
- 27 *Why is the gate not there?*

*28 Is it next to someone's house?*

*29 Is the farmer a boy or a girl?*

*30 Is the farmer inside the barn?*

*31 What season is it?*

—

# Introduce the Rules

- Introduce the four essential rules for producing questions:

1. Ask as many questions as you can.
2. Do not stop to discuss, judge, or answer the questions.
3. Write down every question exactly as it is stated.
4. Change any statement into a question.

# Make a List of Questions

- Following the rules, participants make a list of questions using the QFocus as the focus for their questions. Number each question (1, 2, 3, etc.) This step helps people think divergently.

# Improve questions

Participants work with the questions they produced. This step helps people do high-level work with their questions and identify how different types of questions elicit different types of information and answers.

Questions can be open- or closed-ended. Closed-ended questions can be answered with yes, no, or with one word. Open-ended questions require an explanation and cannot be answered with yes, no, or with one word.

Categorize questions as closed-ended or open-ended.

Participants find closed-ended questions and mark them with a “C.” They find open-ended questions and mark them with an “O.”

# Categorizing Questions: Closed/ Open

## Definitions:

- Closed-ended questions can be answered with a “yes” or “no” or with a one-word answer.
- Open-ended questions require more explanation.

Directions: Identify your questions as closed-ended or open-ended by marking them with a “C” or an “O.”

# Discussion

## Closed-ended Questions

**Advantages**

**Disadvantages**





# Discussion

## Open-ended Questions

**Advantages**

**Disadvantages**

# Improving Questions

- **Take one closed-ended question and change it into an open-ended question.**



- **Take one open-ended question and change it into a closed-ended question.**

# Strategize: Prioritizing Questions

## Review your list of questions

- Choose the three questions you consider most important.
- While prioritizing, think about your Question Focus: *Some students are not asking questions.*

## After prioritizing consider...

- Why did you choose those three questions?
- Where are your priority questions in the sequence of your entire list of questions?

# Strategize: Action Plan

From priority questions to action plan...

In order to answer your priority questions:

- What do you need to *know*? Information
- What do you need to *do*? Tasks

Discuss the value of each type of question. Identify advantages and disadvantages of closed-ended questions. Identify advantages and disadvantages of open-ended questions.

Change questions from one type to another. In other words, change one closed-ended question to an open-ended question. Then, change one open-ended question to closed-ended one.

# *Strategize*

## Prioritize questions

Prioritization instructions should bring participants back to the central objective. This step helps participants think convergently. For students, prioritization instructions bring them back to teaching objectives and the plan for using student-generated questions. You can prioritize as many questions as you want. In our example, we've chosen to prioritize three questions.

Here are some examples of prioritization instructions:

- “Choose three questions that ...”
- You consider most important
- Will help with your research
- Can be used for your experiment
- Will guide your reading/writing
- Can be answered as you read
- Will help you solve the problem

Participants should discuss and share why they selected their priority questions and where their priority questions fell in the sequence of their question list. (For instance, a group may decide to prioritize questions 6, 14, and 27 on their list.)

- **Discuss next steps**
- **How will questions be used? Next steps should align with priority instructions. For students, this further contextualizes how their questions will be used.**



# *Reflect*

- Participants should reflect:
  - What did you learn?
  - How can you use what you learned?
  - This step helps people think metacognitively about how they used questions to learn. It allows them to reflect on new lines of thinking they may have developed.

# General tips for facilitation

Monitor group work and give clarifying instructions as needed.

Listen for the types of questions participants are asking.

Validate everyone's contributions equally.

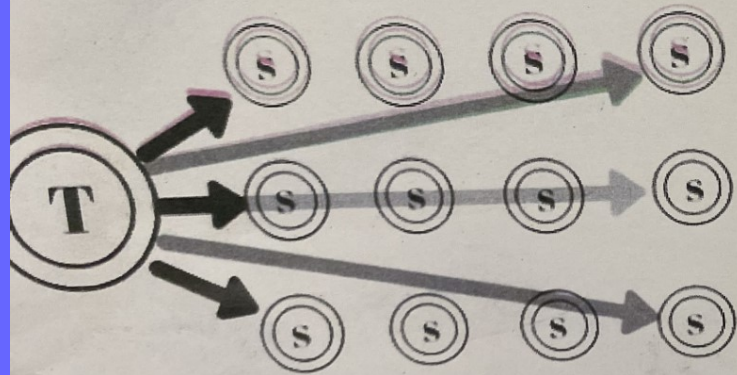
Allow groups to work at their own pace.



# *When learning is this?*

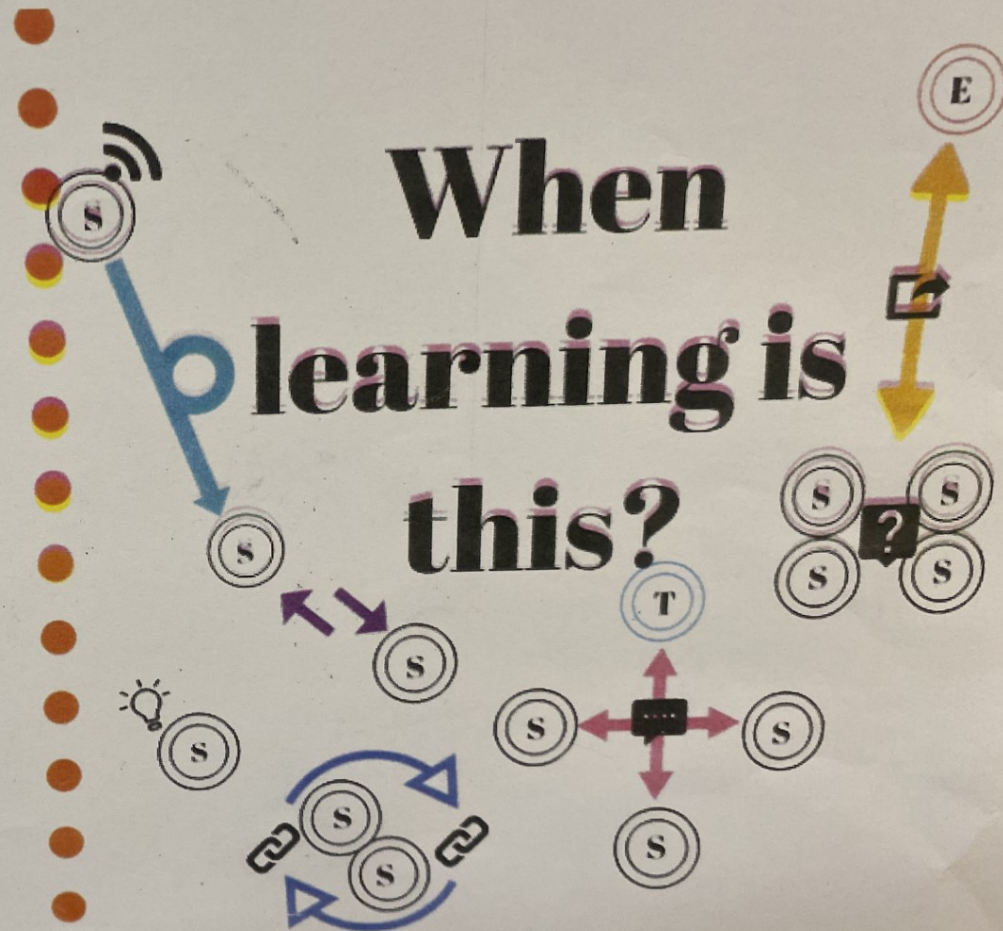


# Why teach like this?



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# When learning is this?



# Traits of Giftedness

No gifted individual is exactly the same, each with their own unique patterns and traits.

**COGNITIVE**  
**CREATIVE**  
**AFFECTIVE**  
**BEHAVIOURAL**



# *Characteristics*

- Intellectual traits
- exceptionally reasoning ability
- facility for abstraction
- intellectual curiosity
- rapid learning rate
- complex thought process
- vivid imagination
- early moral concern
- passion for learning
- powers of concentration
- analytical thinking
- divergent thinking/creativity
- keen sense of justice
- capacity for reflection

# *Characteristics*

- personality traits
- insightful
- need to understand
- need for mental stimulation
- perfectionism
- need for precision/logic
- excellence sense of humour
- intensity
- perseverance
- acute self-awareness
- nonconformity
- questioning rules/authority
- tendency to introversion



***Stay calm.***

***Let everyone have their say.***

***Listen.***

***Then, try to figure out what's going to  
make all these different voices and  
ideas come together.***

***It works for us.***

***(Jim Henson)***



[This Photo-SA-NC](#)