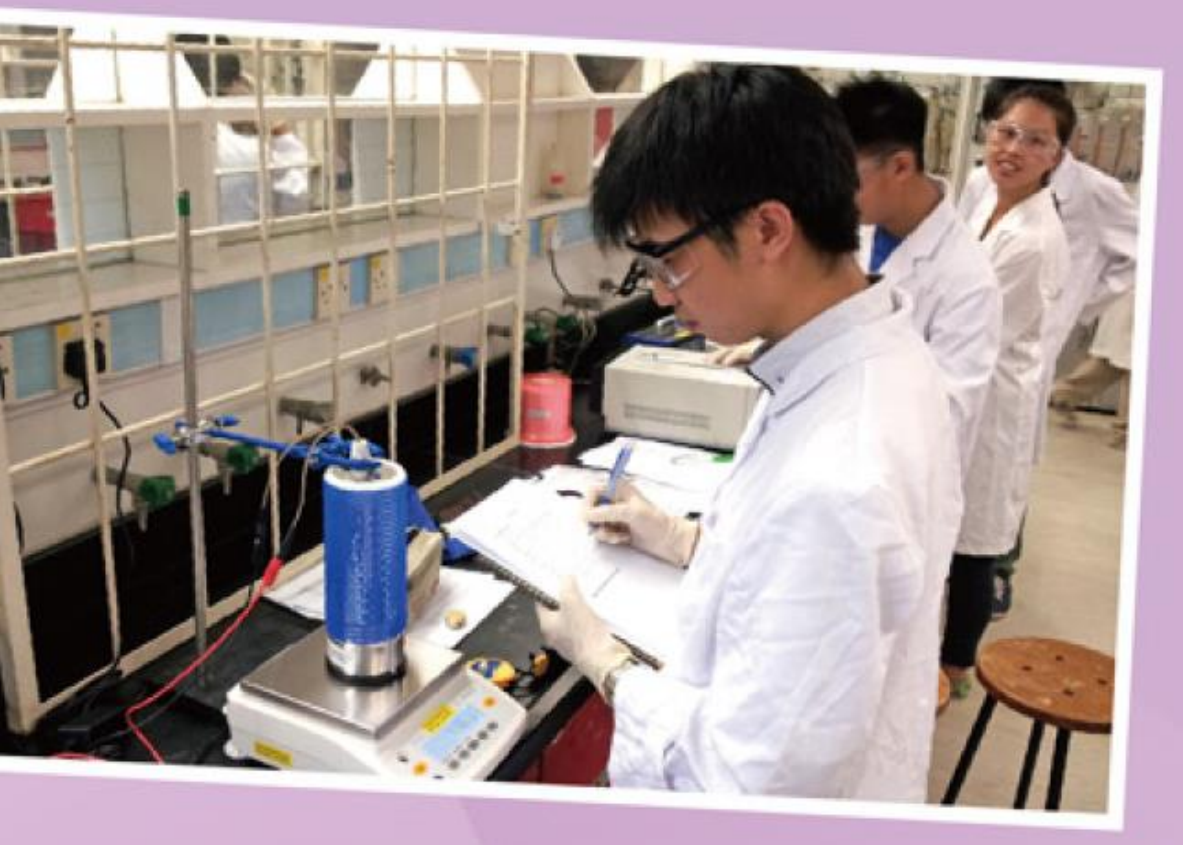


# METAPHORISING SCIENCE TEACHERS

BACHELOR OF EDUCATION AND BACHELOR OF SCIENCE (JUPAS CODE: 6119)

Updated in May 2023

Short thematic talk: Metaphorising science teachers

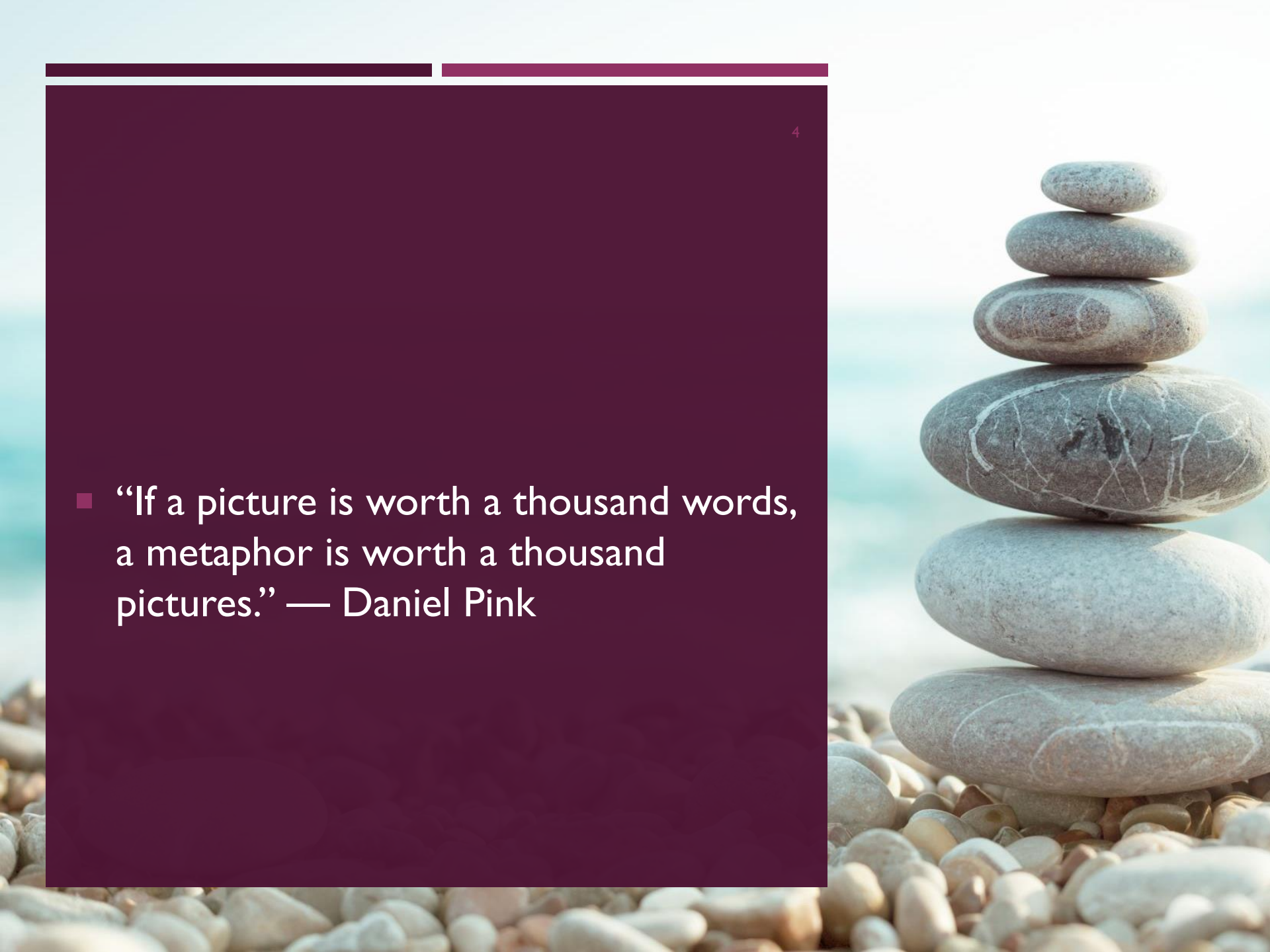
Admissions tips

What our students say

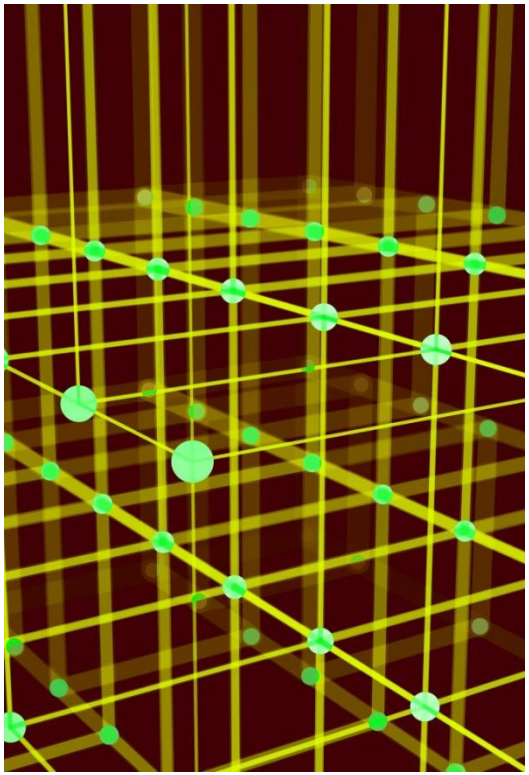
Q&A session

# DESCRIBE A GOOD SCIENCE TEACHER (*PLEASE USE KEYWORDS*).

- “If a picture is worth a thousand words, a metaphor is worth a thousand pictures.” — Daniel Pink



# METAPHOR



- Originates from a Greek word meaning "to carry across" (Schon, 1979).

- One can internalise one's understanding of the *new situation* by relating new information directly to *prior experience* and thus metaphor offers a vehicle for learning about one's own thinking.

# METAPHORS: AS A TEACHER

Hamilton, E. R. (2016). Picture This: Multimodal representations of prospective teachers' metaphors about teachers and teaching. *Teaching and Teacher Education*, *55*, 33-44.

# A TEACHER IS ….

| | | | |
|---|---|---|---|
| A gardener | A juggler | A second parent | A tour guide |
| A superhero | A compass | A salesman aiming to satisfy customers | A conductor leading an orchestra |

# A SCIENCE TEACHER IS…

# A LIFEGUARD

- "Science teacher is like a lifeguard because he has to be responsible to students and stay alert in various experiments."

# A MAGICIAN

- "Science teacher is like a magician, unveiling the mysterious and intriguing nature of science to the audience, who are the students. Every time when the teacher conducts an experiment, it is like performing a magic show. He/she amazes the students by showing a colour change or detecting a special smell, just like a magician surprises the crowd with an unbelievable magic."

# A STRAND OF DNA

- "Science teacher is like a strand of DNA because he inculcates useful science knowledge to his students and passes on the wisdom of science from the older generation."

# FRICTION

- "Science teacher is like friction. A good science teacher is friction that is useful. For example, the friction between the shoes and the floor makes us able to move forward which means a good science teacher can help student make improvements and make a step further. If lacking in this kind of friction, we may slip and not able to move.
- However, a bad science teacher is the friction that makes student difficult to get forward such as compressing student's creativity and imagination."

# REFLECTION TIME

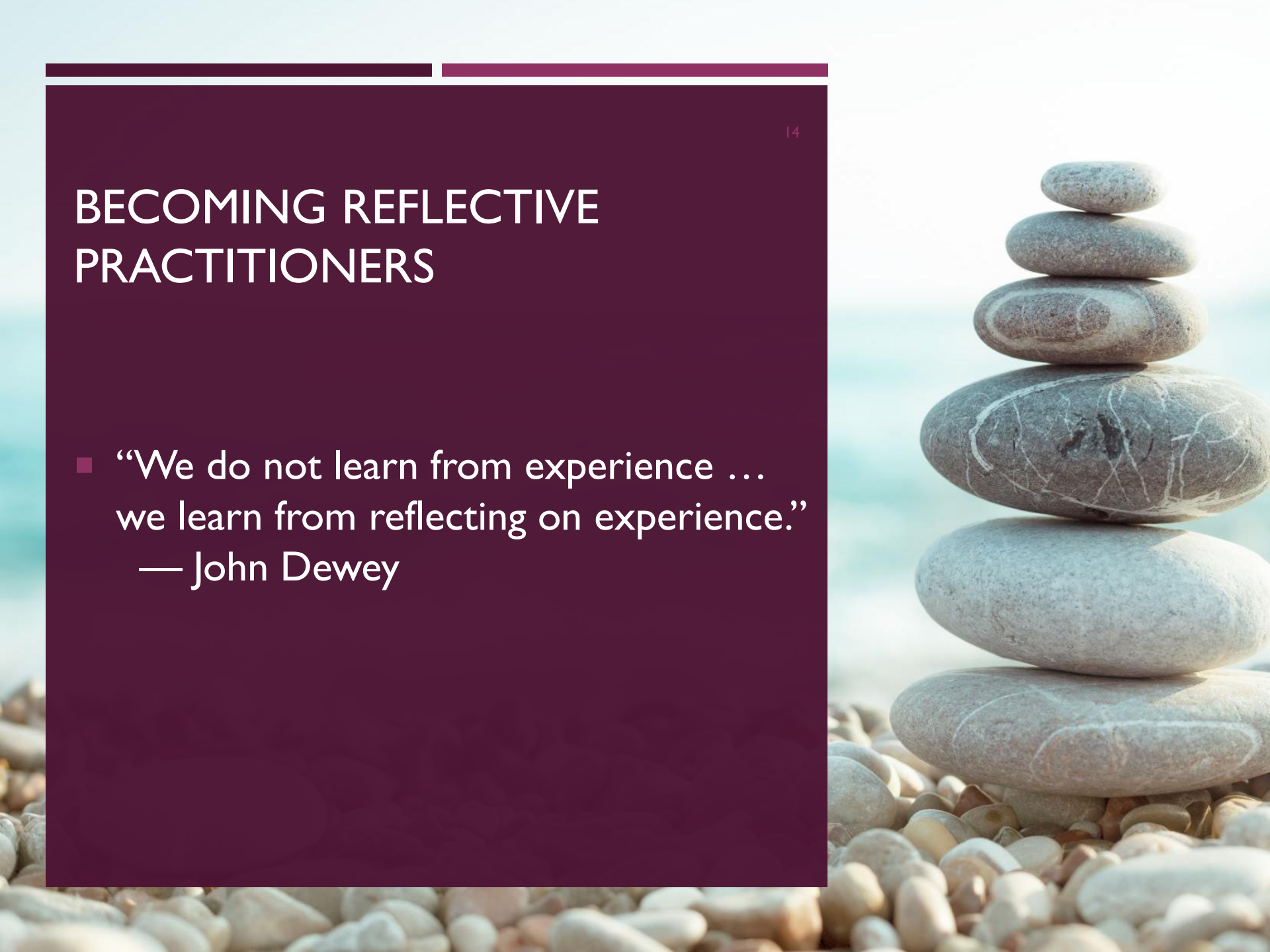
What is your metaphor representing science teachers?

Does it distinguish science teachers from teachers of other subjects?

Does it distinguish good science teachers from any science teachers?

# BECOMING REFLECTIVE PRACTITIONERS

- "We do not learn from experience … we learn from reflecting on experience."
  — John Dewey



# MYTHS ABOUT THE PROGRAMME

- I can take BEd&BSc as a stepping stone and transfer to BSc or other programmes in Year 2.

No. There is no exit point for the BEd&BSc programme. Internal transfer would be subject to the approval of the offering departments, and there is no guarantee of success.

- I can be a Mathematics teacher after graduation from this programme.

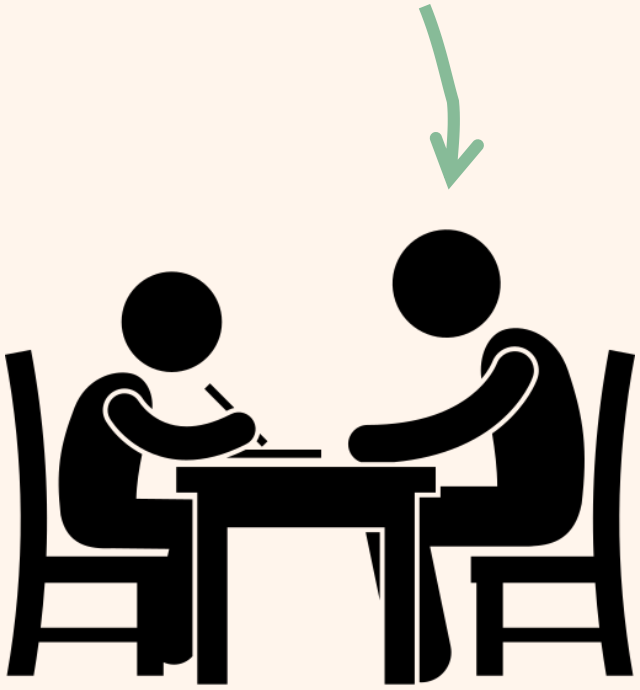
BEd&BSc does not offer Major in Mathematics. The programme aims to train qualified teachers in Science subjects in Hong Kong Secondary Schools. Whether graduates can be recruited as a Maths teacher, it would be subject to the contractual agreement between graduates and their prospective employers (i.e. the Schools). Students are advised to declare Minor in Mathematics and take more Maths electives to enrich their knowledge during the 5-year of studies and add colours to their portfolios.

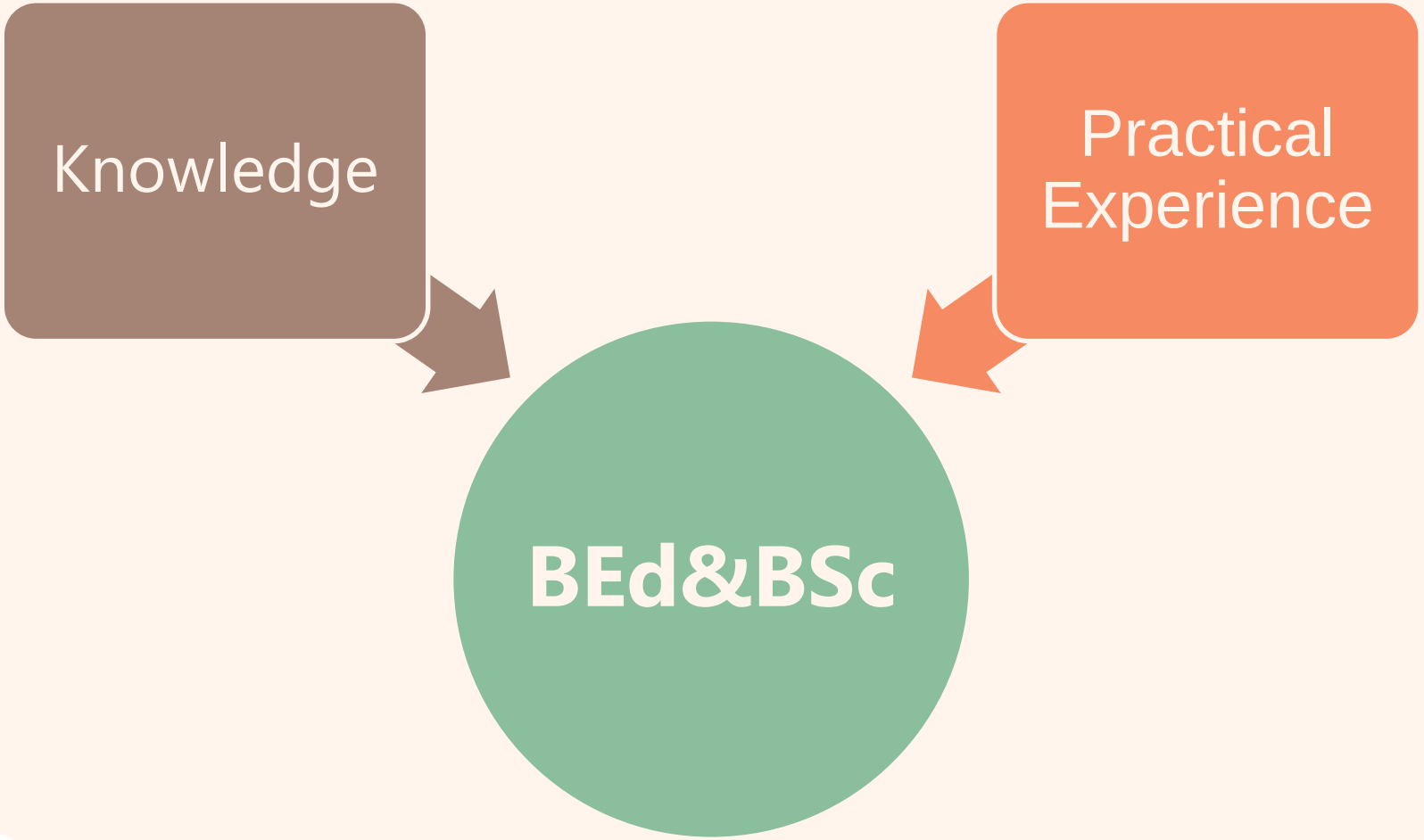
# BEd&BSc Student Sharing

Jayden Shum [Year 4 (Bio)]

# Origin

*Me as a student tutor*




Knowledge
Practical Experience
BEd&BSc

# Knowledge

*Education*

- Support students' diversity
- Psychological theories
- Education philosophy

→ **Comprehensive overview**

*Science*

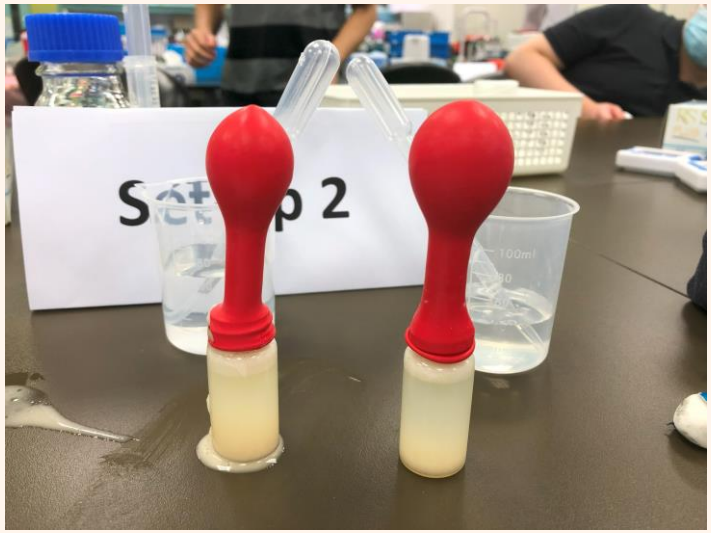
- Science Major
  - Biological Sciences

→ **Mastery of Science knowledge**

# Knowledge

*Science Education*

- Pedagogy
- Curriculum
- Assessment
- Practical Work



# Practical Experience

*Experiential learning*

STEM Workshop

Design Thinking

# Practical Experience

*Professional Practicum*

Apply & Learn

Challenging & Fruitful

# Thank you