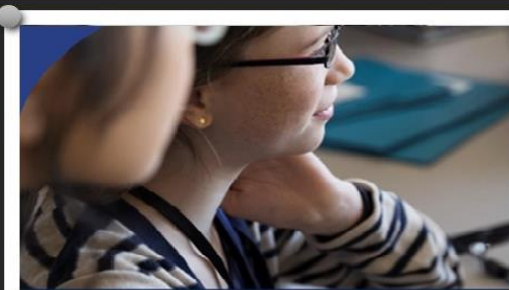


WebSharing Series *for* Teachers *on* Teaching, Learning & Assessment



5TH WEBSHARING (*LEARNING SCIENCE BY IDEATION*): “SIMPLE SCIENCE CONCEPTS, CHALLENGING TASKS”

WEDNESDAY | 31ST MAY 2023 | 8.00 PM TO 9.30 PM (SG, CN, HK & PER TIME) | VIA ZOOM

Register at: <https://shorturl.at/cANPT>

2.00 to 3.30 PM (Kigali, Africa) | 7.00 to 8.30 PM (Bangkok & Phnom Penh)

Meeting Link & Pre-Session Resources (Wakelet) will be shared before the Session | Participation is **Complimentary & by Invited Registration**



For Participants who have or are...

- ✓ Practising Science Teachers (beginning or in-service)
- ✓ Some or no classroom teaching experience (aspiring / pre-service)
- ✓ Educational Researchers
- ✓ Public/Private Institution Educators



Takeaways participants may expect...

- ✓ Divergent interpretations on given science learning tasks
- ✓ Logical and Analytical reasoning using simple science concepts
- ✓ Pedagogical & Assessment Ideas
- ✓ Classroom, Lab & Field T&L Ideas



How the WebSharing will proceed...

- ✓ **Pre-Session** Information & Readings on the Wakelet Portal
- ✓ **40-50 min Seminar** “Simple Science Concepts, Challenging Tasks”
- ✓ **10 min Post-Seminar** Q & A
- ✓ **30 min Interactive Practices** (optional)

Theme: *The Ideation Classroom*[®] | Session Synopsis: *Simple Science Concepts, Challenging Tasks*

The Singapore Science Curriculum Framework was refreshed in 2019, with a focus on **IN**quiry, **IN**novation, **IN**spiration (a.k.a. “the 3 IN’s”), and the *Practices of Science*. Teachers are encouraged to use engaging pedagogies and provide challenging learning opportunities and assessments. Dr Tan Kok Siang, an experienced science teacher and educator-researcher, will share examples in this WebSharing. These examples aim to present “simple” science concepts in a way that promotes innovative and critical thinking. By using past examination papers, Dr. Tan will guide the audience in re-crafting the assessment criteria of these concepts into challenging tasks. The goal is to get students to think more deeply and innovatively, thus aligning with the upgraded features of the revised Science Curriculum and fostering a learning environment that encourages curiosity and creative problem-solving.

About these WebSharings on Teaching, Learning and Assessment Practices in School Science

These sessions aim to inform science teachers (primary and secondary) on practices, resources, issues, and news relating to the teaching, learning and assessment of school science. Each session comprises (i) a 40-min *talk-with-demonstration activity* on a topic, theme, or an aspect of school science, (ii) a 20-min *dialogue-cum-Q&A session*, which may include other aspects of School Science, and (iii) an *optional* 30-min *interactive practice* segment for participants’ engagement. These Zoom-based sessions are complimentary, and participation is by invitation. All practising school science teachers, educators, and researchers (including experienced, aspiring, and beginning science teachers) are most welcome.

About the Speaker, Dr Tan Kok Siang, PhD, BSc, FPDE, DipEd | For more information, visit: <https://sgreflect.org>



Dr Tan Kok Siang

Dr Tan retired in September 2021 after working as a science teacher educator and academic for more than 20 years. He is now a Senior Consultant (Science & STEM Education) working on local and international educational projects relating to Science Inquiry Learning, STEM/STEAM Education, and Assessment Practices. He had worked as a Quality Assurance Chemist in the pharmaceutical industry before becoming a school teacher in 1989. He taught secondary school science for 12 years, including seven years as the Science Departmental Head. In 2000 he joined the academia to research on science education, and to train and certify school science teachers. He had taught, done, and published pedagogical and assessment research and practices on reflective learning, critical thinking, science inquiry, school experimental science, integrative learning, affective learning, values education, and assessment. He is now actively teaching and conducting Science and STEM programmes and sessions for teachers and students locally, regionally, and internationally.

Earlier & Current Topics in this WebSharing Series:

- **Session #01:** (23rd October 2021, conducted)
Reflective Learning & School Science
- **Session #02:** (13th November 2021, conducted)
Affective Learning in Science Education
- **Session #03:** (22nd January 2022, conducted)
Assessment Practices in School Science
- **Session #04:** (3rd September 2022, conducted)
Integrating Student Learning & Thinking in Science

Scheduled & Tentative Topics for upcoming WebSharing Sessions:

- ❖ Learning Science by Ideation (Current Series on **3 IN’s & POS**)
- ❖ Creative Problem-Solving, Critical Thinking & Reasoning (Series)
- ❖ Collaborative Science Inquiry
- ❖ School Experimental Science (Series)
- ❖ Differentiated Instruction & Assessment (on request)
- ❖ Describing, Explaining & Questioning (for Schools)

Register at: <https://shorturl.at/cANPT>

Kindly send any query on registration to the following email address: websharing.ks@gmail.com