### Language matters Teaching I. S. through reading and writing

Chau Wai Shing PAOC Ka Chi Secondary School

# Queries about the language policy as a science teacher

- What is the purpose of using English to teach science?
  Would the use of English as the MOI hinder students' understanding of science?
- Does the use of English as the MOI involve the teaching of English language?
- Does the teaching of English language imply a decrease in the teaching time of science?
- How to motivate students to learn science through English?

"If we teach a subject which students find difficult, boring and unappealing, and if on top of that, students are being taught in a language they find difficult, then for them to learn anything is going to be a miracle."

(Deller and Price, 2007)

# Inspirations from "Doing, Talking and Writing Science"

- 1. Science is a cultural construct
- Scientists communicate in specific genres: purposeful, predictable, objective, logical, systematic
- Genres convey thinking patterns, and are hence ways of constructing knowledge.
- ⇒ Teaching science is guiding students to think in specific generic ways: experimental reports, descriptive reports, sequential explanations, analytical arguments, etc.

# Inspirations from "Doing, Talking and Writing Science"

- 2. Learning is from receptive knowledge to productive knowledge
- It is in the transition from receptive knowledge to productive knowledge that conceptualization begins.
- Productive knowledge is an authentic assessment of students' learning.
- ⇒ Teaching is guiding students from the engagement in texts (doing, speaking, listening, reading, viewing) to the organization of knowledge and then to the production in writing.

### Changes in teaching practices

#### 1. From texts to notes

- Using various types of graphic organizers, tables, charts or diagrams to represent different genres.
- Different genres require different types of organizers.
- Guiding students to organize their own notes.
- Examples: F. 1 I.S. Notes

## Changes in teaching practices

#### 2. From speaking to writing

- Guiding students to formulate their understanding into sentences and paragraphs, giving necessary language supports.
- Helping students to link up their paragraphs into passages.
- Examples:
  - F.1: Supply and demand of petroleum fractions
  - F.3: Balanced diet & Short writings

# Thank You!