

**Review of the Book on**  
**“Integrated Learning in Secondary Schools: Theories and Practice”**  
**by**  
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The book “Integrated Learning in Secondary Schools: Theories and Practice” is edited by May Cheng and law Tian You. This is an invaluable collection of essays on the application of different pedagogies in developing the essential skills for the 21<sup>st</sup> century, especially in developed, global societies like Hong Kong.

Though each essay focuses on a different aspect of integrated learning, the general concern is on the development of independent learning, critical thinking, reliable information gathering, reflection, responsible decision making, problem solving, analysis of data, moral values and effective communication in the Secondary students.

Integrated Learning is not a new initiative and a number of countries have attempted to implement it at different levels, especially at the primary level. Due to the constraints, many of these attempts were aborted. The objectives of integrated learning are sound and robust. Integrated learning helps students to make connections between the discrete subjects and develop critical thinking, reflection, social awareness, problem solving and moral and social values. As integrated activities involve group work, sharing and intellectual discussions., students learn to appreciate team work, cooperation and intellectual empathy

However, the successful implementation of integrated learning poses a number of challenges and constraints to both teachers and students. The teachers will have to move out of their comfort zone of specialization to explore other domains of information essential in integrated learning. Authentic problem solving takes on current issues which can be local or global. Teachers have to be updated on the current events and availability of information in different media (e.g.: websites, books, magazines, and reliable newspapers) Students too will not be spared. They need to read widely to engage in meaningful discussions and to respond intelligently to the different questions raised. The key stimulator in integrated learning is a series of probing questions to set students thinking deeper and broadly.

There are altogether 12 chapters. All the 12 essays are well written and suggested methods are well supported by sound theories. Lesson illustrations are described in meticulous details in each of the 12 chapters: five in Section One, four in Section Two and three in Section Three.

I noticed that the new subject, Liberal Studies is frequently cited as an example of integrated learning. The composition of Liberal Studies is very broad, including both humanities and science. Hence the implementation of the subject is very challenging.

Section One is subtitled Integrated Learning and Pedagogy. Chapter 1 addresses the use of issue-centred investigations in Liberal Studies. The problems encountered by teachers and students on the design and implementation of issue-centred investigation are also being discussed. The dilemmas in the teaching of Liberal Studies in secondary schools are the focus of discussion in Chapter 2. Teachers have to ensure the coverage of the broad range of topics and also to allow time to foster thinking in the students. The use of scientific issue as a teaching strategy in Chapter Three is current and presents authentic problem solving. The issue of pesticides in vegetables is used as an example of teaching through the scientific strategy. This will alert students to the current hygienic problem encountered by the population in Hong Kong.

Chapter Four and Five raise awareness of culture and history in the teaching of science. Students need to appreciate the history of development in science to realize the amount of thinking and processing skills that have gone into the discovery and development of gunpowder, acupuncture, musical instruments, machines, just to name a few.

Under Section Two on Learning in Integrated Subjects, field-work is being highlighted as a mean of fostering investigative skills in students in Chapter 1. The important role of values education as part of Liberal Studies is taken up in Chapter Two which explores the direction, strategies, learning design and limitations in fostering values through Liberal Studies. The challenges in ensuring the interaction between knowledge, critical thinking and values in the issue-centred approach in Liberal Studies are discussed in Chapter 3. The development of quality information technology and information technology skills and their connection to daily living are explored in Chapter 4.

Section Three moves into Guiding Students in Project Work through Integrated Subjects. Chapter 1 talks about the design and implementation of Project Work in lower Secondary classes. The use of problem-based learning and experiential learning in Liberal Studies to assist students in identifying an individual topic for Project Work is the focus in Chapter 2. Problem-based learning and experiential learning are two effective ways of getting students to think, reflect, gather information and resolve conflicts. Dialogue Inquiry as an investigative tool for Project Work is the subject of discussion in Chapter 3. Dialogue has been evident as the key to guiding young investigators through the procedures of Project Work.