VMS Active Learning Classroom

Motivation
- Essential skills required to be developed for Computer Scientist/Information Technologist are *problem-solving* and *designing*.
- Knowledge is also required as foundation (and per course description)
- The classic model of lecture + homework (+lab) is mostly abused by students
- In many CS/IT courses, it is possible to learn the knowledge through its application.
    - → integrate skill development with knowledge acquisition
    - → require students to be in active mode of learning

Observation
- Students have been ingrained with the mindset to follow lecturer, or wander out of classroom.
- The cause of passive mode of learning : the requirement to centralize attention on the lecturer
    - → A way to activate the active mindset : *decentralization*

VMS Active Classroom Design
- Lecturer becomes coach
- No central zone or front zone for the centralized attention : seats turn to all directions
- Facilitate small group study
- All desks and walls readily serve as scrap paper for discussion
- Sockets for electricity is adequate for every student at every desk
- Effective Wifi connection
- Personal laptop computer or at least tablet or phone is essential

Immediate Impact
- **NEEDED:** *new teaching process*
- Most lecturers reported that they had just realized that many students had not understood what they had lectured.
- Significantly fewer students staying uninvolved during class
- *Teacher is more tired* (fitness improved in a few weeks)

Key Questions on Teaching Process
- Q: Should this environment be appropriate only with course that targets application skills ?

- Q: How may knowledge content be taught?

References
- http://portal.scitech.au.edu/thitipong/index.php/vms-is-developing-classrooms-that-support-active-learning/
- http://portal.scitech.au.edu/thitipong/index.php/vms-active-learning-pedagogy-part-1/
- http://portal.scitech.au.edu/thitipong/index.php/vms-active-learning-pedagogy-part-2/