

Ideal Science Teachers Who Make Science Their Students' Favorite Lesson

Knowledge Management Institute (KMI.)

During April 20 – 21, this year, the Knowledge Management Institute (KMI) in cooperation with the Thai Academy of Science and Technology Foundation (TAST) organized a conference/workshop on “**Ideal Science Teachers Who Make Science Their Students' Favorite Lesson**” in the Science Teaching and Learning Innovation Network at School Level Project, at Salaya Pavilion Hotel, Mahidol University International College, Nakhon Pathom Province. 30 science teachers were selected through polling among science students all over the country on ideal science teachers who give them inspirations to become scientists. These selected science teachers gathered to exchange knowledge and share experiences and pride as science teachers, aiming at creating a body of knowledge on science teaching and learning to cultivate scientific minds among students, from all teachers' first hand experiences.

Professor Dr.Vicharn Phanich M.D.KMI Director, remarked that all participating science teachers were capable of teaching children to think scientifically. Such a methodology cannot be found in textbooks, but exists in the teachers themselves. Scientific thinking keeps children easily satisfied, and makes the world more understandable to them. Such qualities not only make them good scientists, but also good citizens of the country.

Prayong Yuchaiyen of Sribunyanusorn Municipal School, Samut Sakhon Province, said that she created fun in science lesson by using natural phenomena such as overcast sky, hot spell, irregular rain pattern, to pose questions seeking students' comments without judging those comments right or wrong, before providing explanations leading to the lessons. She also said that she had to change her role from a strict teacher to a good-natured one, as she found that a strict teacher seemed to be always on the opposite side of students. She changed herself by telling funny stories to

students, making them eager to attend her class and to finally get science lessons. This tactic worked very well.

Namphueng Sup-Uthumphon, of Demonstration School, Chulalongkorn University,

said that science students at present found themselves in highly competitive atmosphere, aiming primarily at becoming medical students. Some students with high academic achievements had problems in coexisting with others. It was therefore necessary to cultivate scientific minds in them, rather than competing for seats or high grades in examinations. Namphueng herself gave students high grades for teamwork, and stressed the importance of science study in daily life at every session. She also told students that science study would not limit them to medical profession, and suggested additional knowledge sources for them to study. She organized activities concerning biology, to demonstrate how students can apply the knowledge in their daily lives, and how to solve problems. As a result, students learn to share their knowledge with fellow classmates, unlike in the past when students with high academic achievements held fast to the knowledge that made them better or smarter. Thus, they learn to coexist happily with others, while doing well in their class.



Suphachai Chimsang of Kamphaengsaen Airbase

Secondary School, Nakhon Pathom Province,

meanwhile, said that his teaching was non-teaching method, i.e. resorting to story-telling, games and toys, since his subject, physics, was quite difficult. Direct

teaching of the subject would turn students away. His tactics made students relaxed and ready to enjoy the session. As a result, they preferred studying physics. When he had the opportunity to teach at Nong Ya Sai School in Suphan Buri, he tried using common objects as teaching materials, and was successful as well. He set up simple tests for students such as having them swing school – bags around or cross forks and spoons, asking which rules in physics would apply, before getting into lessons. Such methods made children interested in the lessons. There are various techniques to attract students to science and to think

scientifically, from the exchanges of all 30 ideal science teachers, which have been posted on website www.kmi.or.th to encourage more learning and exchanging among science teachers via the internet.

Professor Dr.Yodhathai Thebtaranonth, Chairman of TAST Executive Board as a former science student and teacher himself remarked that forcing students to learn was definitely not the best method. He never forced anyone to study. Teachers of physics, biology and chemistry, meanwhile, should not be obsessed with students' performances and grades. They should have the conviction that all subjects can be combined and children can emerge with good achievements at the end. Moreover, children should be taught to look at common objects around them scientifically, which can be fun, such as when gardening at home, several objects can be taken as scientific materials.

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