



香港城市大學
City University of Hong Kong

Scientific teaching for the discovery-enriched curriculum

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Principal Investigator: Dr Arul Lenus Roy VELLAISAMY

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Abstract:

For decades science courses have been taught through traditional lectures and laboratory exercises.

The traditional way of teaching is not adequate to achieve the intended learning outcome of a particular course/subject. For teaching discovery-enriched science subjects, there must be an approach of "scientific teaching," which explains the concept of science at its best-experimental, rigorous, and with solid evidences. Through this proposal, we explore the scientific way of discovery-enriched science teaching at research universities. As a research university, City University of Hong Kong has its own niche on this development since we have strong research background and this helps us to advance our scientific teaching hence the student learning. This concept will help global universities to accelerate the reform of science education. Through this project, we intend to acquire resources to implement effective instructional methods, which include group-presentations in lectures, inquiry-based laboratories, and interactive class room activities. A data set will be acquired through this project to understand the student learning using above mentioned qualitative methods and the data will be analyzed to set guidelines for enhanced student learning.