The Application of Web Geographic Information System (Web GIS)
in Students’ Smart Learning on a Smart Green Campus

Abstract:
The crisis of climate change and rapid urbanization have presented serious challenges to the future. Today, smart and sustainable city strategies aim to achieve a balance between conservation and urban development with the aid of smart technology. Therefore, it is vital for our university to outfit our students with contemporary knowledge to cope with the emerging trend towards developing a smart and sustainable future. This project aims at proposing and validating a new smart learning approach (Industrial-University Collaborative, I-U) pedagogy that initiates smart technologies (Web GIS) to develop sustainable concepts and experiment at a smaller campus level, named “Smart Green Campus”.

The proposed I-U pedagogy will employ two cluster courses as a test bed to explore the pedagogical feasibility and effectiveness of “Smart Green Campus” through smart learning. The goals of the pedagogy are 1) to increase student’s environmental awareness and to realize best practices by changing the attitude of students towards sustainability; 2) to enable students to experience the use of industry leading Web GIS platform and gain competitive edge in the job market. Moreover, the findings will be transferred to University’s relevant departments to assist in University campus planning and future Smart Campus development in long run.

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