



香港城市大學
City University of Hong Kong

Smart Ambience for Affective Learning (SAMAL): An innovative exploration of Smart Ambience for integrating affect and cognition in learning Life Science and Information Management

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Abstract:

Learning theories and e-learning tools in the past decades have mostly been focusing on the cognitive aspect of learning where thinking and learning is viewed as a process of information representation and manipulation within the human mind. While no one can deny the important role of affect in learning, and conventionally, instructional steps have intuitively taken into account affect states of the learners, such as motivated, curious, bored and engaged, etc.. To our knowledge, there has not been any development in providing a learning environment that seeks to exploit the role of affect in learning. This project aims to apply CityU Smart Ambience technology to provide an innovative learning environment, coupled with an instructional approach, that integrates cognition and affect to enhance students' learning effectiveness and appreciation of the subject matters. Specifically, we will focus on assisting students to appreciate and to be motivated to learn general knowledge in information management and life science as well as the associated narrative and information literacy skills through a novel affective learning environment that makes use of state-of-the-art virtual interactive scenarios developed at City University of Hong Kong.

The deliverable, which will be called SAMAL (Smart AMbience for Affective Learning) will provide a unique environment for integrating cognitive and affective approaches to enhance learning. SAMAL will initially be deployed in Gateway Education and foundation courses designed by FB and FSE respectively, and will consist of a series of interactive learning scenarios with affectively evocative virtual reality games and activities designed to (a) motivate and stimulate different ways of thinking through changing affect states; and (b) help students to acquire and apply general knowledge in Information Management and Life Science. This approach aims to realize CityU mission of whole-person development through cross-Faculty co-operation and synergizing the respective strengths and innovations of CS, BCH and IS Departments. The output of this project is potentially applicable to other GE or foundation courses for all CityU students.