The Museum of Life Sciences
Toward a holistic Science Education

Abstract

'Life is an unanswered question, but let's believe in dignity and the importance of the question'
Tennessee Williams

The premise of this thesis lies in the various emerging philosophies concerning science education in the 21st century, where there is a paradigm shift from mechanistic 'textbook-based education' to a more systematic and holistic pedagogy. In Singapore, this is accentuated by the change in education syllabus in which learning is done evermore so outside the classroom with 'hands-on' experience, where analytical project work is given greater weightage relative to examinations. The science subjects are particularly affected, as the government is quick to embrace the rapidly rising life sciences industry as one of the main economic driving force. These subjects used to be dry and technical and initiatives are now taken to make them more fascinating, attractive and easily understood. Many teachers are sent overseas for special training stints in 'new teaching methods' in the hope that they are able to disseminate scientific theories in a more effective way to students.

The proposed museum provides an alternative venue for the learning and teaching of life sciences, in particular biology. It supplements what is being taught in school of provides the opportunity for 'hands-on' learning, in which students are able to see and feel the processes involved in life. The museum creates an open environment to nurture a new learning paradigm, replacing traditional classroom situations with a 'purpose structured' sequence of galleries, interfacing commercial/retail, recreational and education activities. The various galleries are structured logically in accordance to various themes with different spatial and lighting requirements, forming a subject narrative enabling an easy grasp of the theories involved.