Education? Entertainment? The Concept and Practice of Serious Game at "Climate Change Exhibition Hall" in National Science and Technology Museum

Fang-yi SU

Research Assistant, Exhibition Division, National Science and Technology Museum

Abstract

"Climatic change", a global and local environmental issue, has recently been a common concern of every developed country. In Taiwan, it has received much more attention after the great damage caused by the severe flooding of Typhoon Morakot in 2008. To call for the public's awareness of climate change, arouse their interest and further focus their attention on environmental sustainability, the National Science and Technology Museum (hereafter "NSTM") established the "Climate Change" Permanent Exhibition Hall in 2010, with subsidies from the Ministry of Science and Technology. With themed space, visual media technology, specified installations and applications, it offers visitors participatory experiences and transforms "climate change", a serious issue, into content related to the general public's life experiences. Moreover, it demonstrates this issue from both local and global perspectives, enabling visitors to consider their responsibility for the environment as global citizens, while deepening visitors' understanding of climate change. The exhibition not only invites more people to join and study this particular issue, but also lays the foundation of environmental education for the general public.

In "Disasters, Risks, Environmental Change, and Value Choices: Challenges of Postnormal Science to Exhibitions in Museums", Wang Yu-Juin (2011) indicated that environmental science, unlike normal science which has standardized laws, belongs to post-normal science. Under such a great challenge, determining how to design educational and entertaining exhibitions and exhibitions with scientific implications in museums is important. This article analyzes the case of the "Climate Change" Permanent Exhibition Hall in the NSTM to explore the following two questions:

(1) Curator Han Pao-teh once said that exhibitions can be academia-related, but they could be neither academia nor textbooks. The questions arise: How shall we design an exhibition which disseminates science knowledge and education? How shall we appropriately interpret issues related to climate change with the application of the theory of serious games? How shall we help visitors gain more visiting experiences while carrying the content of scientific displays out of serious and dull introductions on the pictures and lightboxes? (2) Serious games in essence refer to an activity in which two or more decision-makers try to realize their expected goals in a limited environment. It is not a means of recreation, but an activity with clear and concrete educational goals. Environmental issues have long been closely related to human development. The following are the questions to be explored: Has the "Climate Change" Permanent Exhibition Hall tried to use serious games to convey serious issues which are closely related to sustainable development in the future? Do visitors gain scientific literacy through such a design? Does the exhibition make dull information lively, interesting, and interactive to achieve certain educational goals? Does the exhibition strike a balance between education and entertainment?