Teaching Climate Change in Year 8!

Naim Che Pee, Peter Blanchfield and Colin Higgins
The University of Nottingham, UK

Abstract: Computer games are said to be prominent as a supporting medium in educating the new generation of students who have a high exposure to computer games in their daily life. This paper outlines the development of a computer game as part of the Year 8 Geography curriculum at a Nottingham school. The environmental impact of industry sectors on such things as global warming, air and river pollution is a major problem throughout the world. It is thus an important module in the current curriculum and in the particular study is being taught to Year 8 students. Methods of teaching currently used include books, videos, and the Internet search engines. The purpose of this research has been to introduce an added tool of a computer game and assess its effectiveness as a supplementary learning tool for teaching and learning purposes in global warming issues. An observation study using a prototype is being carried out amongst the secondary school students to study the performance of their spatial awareness and their cognitive skills. The study has also addressed issues regarding gender and teaching period time allocation in a typical classroom session. This current paper emphasizes key issues addressed in the design of the game.

Keywords: Computer games, computer-based learning, teaching, learning