



Use of an Exploratory Software for Teaching and Learning about Environmental Issues

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The preliminary study reported in this poster presents an Environmental Education (EE) activity which was designed so that students can use exploratory software to learn about atmospheric pollution in Athens and some interrelated environmental issues (acid rain and urban transportation) and their impact on the Acropolis marbles. The exploratory software is 'E-slate' (<http://etl.ppp.uoa.gr> and <http://e-slate.cti.gr>), an authoring tool for the design and construction of microworlds based and run on the basis of specific educational scenarios.

The study took place within four two-hour sessions. Three groups of pupils aged twelve, fourteen and sixteen years old participated in the activity in pairs. Data collection was based on the researchers' observations and notes on the pupils' actions and interactions, the recordings of the pupils' conversations and the pupils' responses to questionnaires.

The findings of the study are presented and discussed. The study concludes that there is particular interest in further exploring the relation between EE and constructionist pedagogy using exploratory software with the aim to enrich both fields and in order to promote more meaningful learning among learners.

Keywords

Environmental Education, Exploratory Software, E-Slate, Atmospheric Pollution, Environmental Issues