Using Wikis for Environmental Education and Awareness of Primary and Secondary Education Students in Greece

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ABSTRACT

Environmental education (EE) institutions worldwide strive to promote awareness and learning related to the protection of the environment and sustainability issues. In this effort, they take stock of the capabilities of online and social media. This paper briefly overviews characteristic examples for the use of social media for environmental education, as well as basic ideas that underpin the use of wikis in particular in education and learning, and discusses the ways in which wikis can be used, within environmental education programs, for raising environmental awareness of primary and secondary education students. This discussion is based on a research project employing wikis and conducted during 2011-2012 in Athens, Greece. The research questions guiding this project, the design and implementation choices of the research, the difficulties encountered and the revisions decided, as well as the research results and findings, together with proposals for further research work, constitute the contents of the paper.

Keywords: Environmental Education, Greece, Primary Education, Secondary Education, Social Media, Wiki

1. INTRODUCTION

Internet evolution is continuous and directly affects all areas of human activity, especially with the advent of Web 2.0 technologies and social applications. Social media are increasingly adopted by a large number of users, with concepts like “interaction” and “user-generated content” becoming more and more familiar to the average internet user of today.

These rapid developments have also caused significant changes in the field of educational technologies. The emphasis now is no longer limited to the deployment of IT and internet access infrastructures in schools, but extends beyond that to increased students’ levels of digital literacy.

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In Greece, the Ministry of Education policy for modernizing public schools articulates a New School (Greek Ministry of Education n.d.) vision based on the so-called Digital School concept, which incorporates programs for digital classrooms and digital educational content (Digital School Initiative n.d.).

On the other hand, as early as 1993, namely quite a few years before the massive entrance of schools in the digital age, the agenda of environmental education (EE) has been introduced in the formal education curriculum at an international scale. According to the International Union for the Conservation of Nature (IUCN), EE can be defined as “… the process of recognizing values and clarifying concepts in order to develop skills and attitudes necessary to understand and appreciate the interrelatedness among men, his culture and his biophysical surroundings. EE also entails practice in decision-making and self-formulation of a code of behavior about issues concerning environmental quality” (IUCN 1970).

The Greek Ministry of Education has pursued development of environmental awareness for students in joint collaboration with other administrative agencies and NGOs, as well as through a network of regional Centers for Environmental Education (CEE) all over Greece. The mission of Greek CEEs is to provide formal, non-formal and informal environmental education to students and adults. In this landscape, the use of social media for environmental education in Greece could, in principle, be favored by two major factors: (a) the Greek Ministry of Education New School policy, as well as (b) the presence of Greek CEEs in new media and social media.

Still, despite the many successful attempts to integrate social media in EE projects that have been implemented worldwide, there is a need for guidelines and frameworks concerning the integration and use of these tools in the Greek educational system and, more specifically, in the Centers for Environmental Education on which the research reported is focused. In this respect, the research effort presented in this paper has tried to bring forward some specific research questions that could help formulate elements of such a framework, with a focus on wiki platforms which have been used as the enabling technology for the underlying case study.

2. THE USE OF SOCIAL MEDIA IN EE: SELECTED GREEK AND INTERNATIONAL CASES

2.1. Centers for Environmental Education in Greece

Centers for Environmental Education (CEEs) are the primary vehicle for the development of EE in Greece. For Greek CEEs, like otherwise, ICT use is essential while planning and developing environmental programs, mainly in terms of using internet to access environmental information (Coleman & Penuel 2000) as well as terms of using interactive multimedia and virtual environments (Moore & Huber 2001).

The use of ICT limited to Web 1.0 tools, with all the benefits provided, does not make it possible to achieve some major EE objectives, like communication, collaboration, interaction and a school open to society. These objectives can be reached with the use of web 2.0 tools, which are not exhausted in social media but extend to a wide range of applications. Unfortunately a closer look at Greek reality shows that, while CEEs seek their online presence, their effort is usually limited to the maintenance of an updated website with no satisfactory use of social media.

Some interesting results arise when searching the social media profiles of Greek CEEs. Of the 41 CEEs operating during school year 2011-2012, only 24 were found to maintain one or more social media profiles. The vast majority of these (20 CEEs) were on Facebook (profile, page, group), while a minority of four CEEs appeared to be experimenting with more than one social media sites.
From Facebook to WhatsApp: The Changing Mood of Social Networking in India
www.igi-global.com/article/from-facebook-to-whatsapp/120712?camid=4v1a

Globalization and the Dynamics of Work Markets
www.igi-global.com/chapter/globalization-and-the-dynamics-of-work-markets/113550?camid=4v1a