

EDUCATIONAL WEB COMMUNITIES IN GREECE: A CRITICAL SURVEY

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Abstract

Online (virtual, web, Internet-mediated) communities share some functional and operational characteristics which distinguish them from other types of web sites and may vary from basic attributes to specific tools and services and furthermore to various artefacts produced by the members of these web communities. Based on the above ascertainment, the first part of this work refers to the functional specification of an educational web community and the second part aims to gather information about educational websites in Greece and evaluate, through a critical review, their potentiality as web educational communities, especially for the professional development of teachers and educators.

Introduction

According to Rheingold (1993), who first coined the term “Virtual Community,” evolution of information and communication technology (ICT) and the formation of the “Cyberspace” comprise a significant baseline in human history. Human-computer interaction (HCI) is now bond connected with important human needs on the personal level (ideas, perceptions and personalities); the social level (social networking); the organizational level (eBusiness, eLearning); and the political level as well (eDemocracy, eCitizenship, eParticipation). Moreover, the advent of more collaborative ICTs such as Web 2.0 technologies, has created a new paradigm of Media Knowledge: classic one-way production of information on the web is substituted by a dynamic process of information co- {production, organization, discovery, sharing} (Kron & Sofos, 2007). With this new model, learning may emerge as a social activity based on collaborative creativity and knowledge sharing through Internet-mediated communities.

Based on the above ascertainment, the first part of this work refers to the functional specification of an educational web community and the second part aims to gather information about educational websites in Greece and evaluate, through a critical review, their potentialities as web educational communities. Results showed evidence of emergence web communities of various types, based

on knowledge and practice sharing, mutual information and development of collaboration.

Terms and Definitions

The term “community” traditionally refers to a group of people who live and act on the same geographical area sharing common aims and values and is determined by four distinctive characteristics: people, common ties, social interactions, and time/space (Hillery, 1955; Poplin, 1979; Stuckey, 2007). Rheingold (1993) first coined the term Virtual Community and defined it as “. . . social aggregations in the network, where people continues (despite various difficulties) to join public conversations, with an adequate level of humanity, thus forming a web of interpersonal relationships within the Cyberspace”, while Fernback and Thompson (1995) acknowledge the formation of electronic communities on the Internet but with the terms “electronic” and “community” being mutually distinctive and state that “. . . not all electronic aggregations are communities. Without the personal effort and commitment which characterizes the notion of community, chat rooms and online forums are just communication means between people with common concerns.” Preece (2000) considers the term “Internet Community” as terminologically weak due to the fact that any form of communication between two or more individuals on the Internet may be considered as a community formation. Thus, she provides a non-ambiguous definition by stating that Internet community is “. . . a group of people interacting in a virtual environment, having common goals, specific rules and behavioral norms.”

Within the general context of learning, a “community of learning” is defined by Reinmann-Rothmeier (2000) as “. . . a community in which members are tied together by a common interest to inquire a certain case in depth and learn together, share knowledge and solve problems collaboratively by this process” and by Kilpatrick et al. (2003) as “. . . group of people who shares a common goal, work together, gain benefits each other, respect different opinions, promote opportunities for active learning and develop a collaborative environment for empowerment of membership and new knowledge formation.” Lipman (2003) refers to the “community of inquiry” as a social and educational environment which leads to the development of problem-solving skills between the members of the community and Hakkarainen et al. (2004) refers to the “innovative knowledge community” where its major characteristic is the formation of new knowledge between the members of the community.

Within the general context of professional learning and development, a “community of practice” is defined by Wenger et al. (2002) as “. . . groups of people who share a concern, a set of problems, or a passion about a topic and who deepen their knowledge and expertise in this area by interacting on an ongoing basis” and by Hildreth et al. (2000) as a “. . . group of professionals tied together

in an informal manner via their engagement in a common class of problems and efforts to find solutions, thus comprising a potential inventory of shared knowledge and expertise.” Moreover, “knowledge community” is defined by Salis and Jones (2002) as “. . . a learning community which is formed around common goals and meaningful issues, pertain common intentions on problem solving actions, comprise a repository of implicit knowledge which potentially can be transformed into an explicit one, produce new knowledge and exploits the index of the emotional intelligence of community members.”

Finally, under the context of general social formations Wenger et al. (2002) refer to the “task groups” where individuals collaborate on the basis of a certain project and “communities of interest” where individuals are sharing common professional or personal interests. Also, there are references to more informal communities such as “communities of relations” based on emotional and social needs of their members, “trading communities” based on economical trades and “virtual worlds communities” based on member’s entertainment needs.

The above definitions provide a basic categorization in order to analyze the findings of the research about the potentiality of Internet-mediated communities and moreover comprise a basic context with three axes: community, education, and underlying technological infrastructure which can be used to form a more general concept, this of an “Internet-mediated educational community” which has the following distinctive characteristics and attributes (see Figure 1):

- people, common ties, interactions in time & space
- common interests & practices
- common learning & educational goals in formal or informal settings
- professional development
- knowledge management & sharing
- ICTs & Web 2.0 services

Figure 1: Internet-mediated Educational Communities



Research

Identity and limitations

The main purpose of this work was to gather information about educational websites in the Greek domain (.gr) and evaluate their potentialities as *Internet*-mediated educational communities. This work was part of a research project for the Postgraduate Studies Program, Primary Education Department at the University of the Aegean. It took place during the 2nd semester of academic year 2009–2010. Research was conducted in a short period of time and cannot take into account the evolution of the Greek domain (.gr) over time and no questionnaires were used among the community members. This was part of another research setup, which is out of the scope of this work.

Methodology

This work was based on a report published from the EU concerning the level of usage of Web 2.0 technologies in educational settings, describing best practices and initiatives from various European countries (Redecker, 2009). More specifically, we examined the evaluation checklist of this report and adapted it on our own needs and our own research questions. Finally, the adapted checklist had three distinctive parts:

- general information such as page identity, demographic data,
- Social tools emphasizing user collaboration with Web 2.0 technologies, and
- artefacts, tangible or intangible, that mediate human activities (Vygotsky, 1978).

Research took place in two phases. During the first phase, an extensive web search was conducted. The most important Greek search engines and thematic portals were examined in order to find educational web sites. After filtering the results with various criteria (for example, the content's update frequency, the validity and reliability of operator, commerciality or not) 37 web sites were finally chosen (See Appendix A for the list of the 37 web sites under evaluation). During the second phase, the set of the web sites was evaluated against the checklist and results were processed.

Results

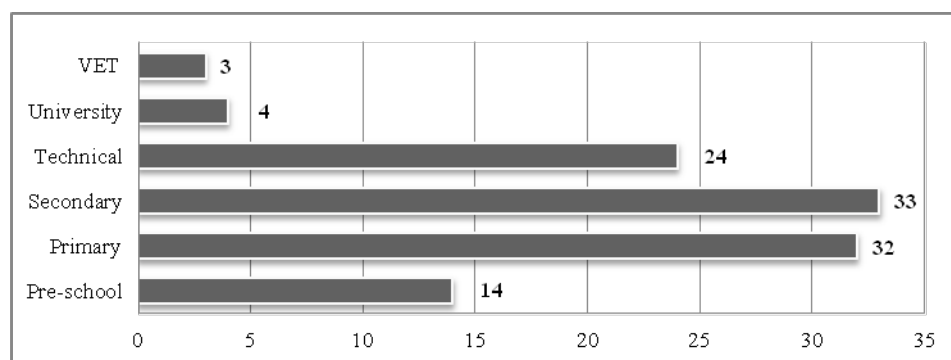
A first finding from the general information checklist results was that 28 (75.7%) of the web sites had an individual (or a group of individuals) as operator, while only 9 (34.3%) had an operator from the public sector (school, university, ministry of education, etc.). Also, another interesting finding was the maturity level of the web sites, i.e., the time of the web sites being “alive” (Table 2).

Table 2: Maturity Level of Web Sites

Years “alive”	Num	%
Less than 1	9	24.33
From 1 to 5	11	29.73
More than 5	13	35.13
No data	4	10.81
Total	37	100.00

According to the technological infrastructure, 33 (89.1%) of the web sites were developed using an Open Source Content Management System (CMS) while only 4 (10.1%) of the web sites were created using static HTML technology. Moreover, as Figure 2 shows, the majority of the web sites refer to K–12 education.

Figure 2: Educational Sectors



As a next step, we searched for evidence about the formation of communities within the examined web sites. Preliminary results showed that 23 (62.16%) of the web sites could be characterized under the general concept of Internet-mediated Educational Communities (See Appendix A, links marked with *). Moreover, evidence of four basic types of communities were found (Table 3), while 25 (67.56%) of the web sites support learning/training and co-operation activities and 23 (62.16%) of the web sites support professional development activities, in general.

Table 3: Types of Communities

Type	Num	%
Community of Practice	4	17.39
Community of Interest	12	52.17
Community of Learning	6	26.10
Task Group	1	4.34
Total	23	100.00

According the usage of interaction and collaboration tools within the members of the web sites (Figure 3), analysis found usage of traditional electronic communication tools such as forums in 22 (59.46%) web sites, while 28 (75.68%) of the web sites provide profiling services for the users, which is a basic characteristic of web communities. Moreover, 24 (64.86%) of the web sites offer learning material sharing among the users, thus stating the increasing need for educational resources on the web for teachers and educators.

Finally, according the type of the produced artefacts by the users of the web sites, research showed a variety of actions and activities (Figure 4) with the most important being exchange of ideas and discussions (62.16%) and file sharing (54.05%).

Figure 3: Usage of Interaction and Collaboration Tools

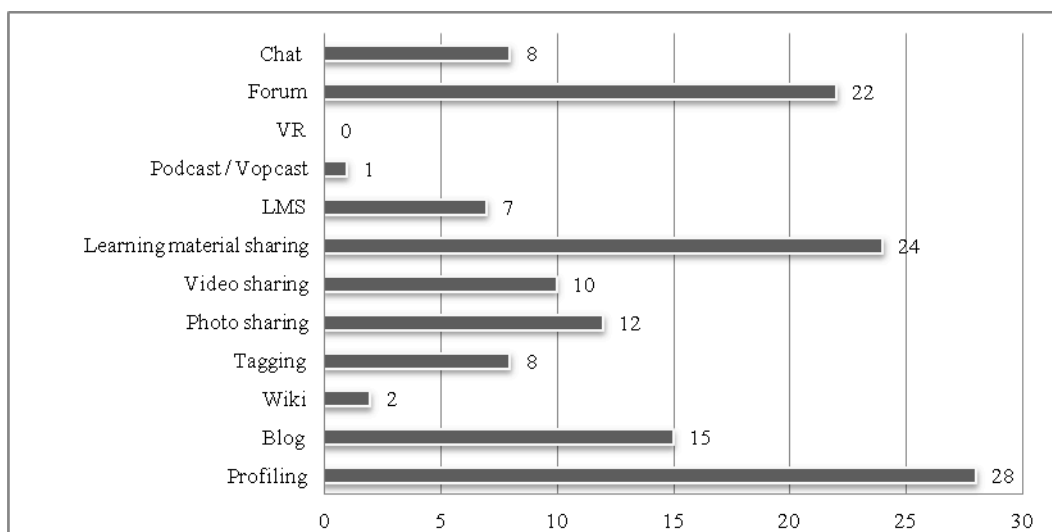
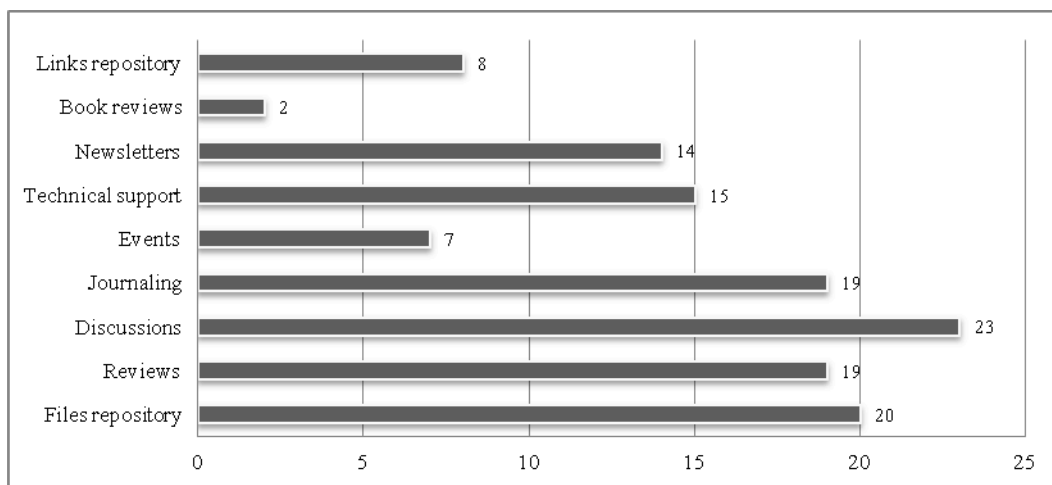


Figure 4: Types of Artefacts Produced by Users



Discussion

Because the formation and sustainability of traditional face-to-face communities could not be facilitated by the organizational and functional structure of Greek educational system, web communities provide more favorable conditions for their application in educational settings, because by nature are eliminating any time and spatial limitations. This fact is revealed through our research findings where evidence of web communities formation were found, having knowledge and practice sharing, information exchange and co-operation as the most dominant characteristics, which promotes learning and self-development in personal and professional level.

Moreover, it is well known that a large amount of tacit knowledge exists in every each school or educational unit, circulated among the closed group of the inter-school community: information is exchange, discussed and reviewed, enhanced with new facts and ideas in an informal context, knowledge is circulate and new knowledge is produced by the application of new didactic practices, methods and cases. The results of this informal procedure are mainly available only to the co-operating teachers and even if those teachers innovate in their professional field and create new frameworks of creative and productive learning, they experience most often a kind of professional isolation (Coutts et al., 2001). A solution to this problem can be the formation of sustainable Internet-mediated educational communities and especially communities of practice, as a mean to exploit practical and every-day professional knowledge of teachers and educators, in order to promote their professional development through forms of informal and continues learning and training.

Via their membership in communities, teachers and educators may potentially:

- discover already existing practices and knowledge more easily.
- enhance their didactic practices more than their isolated colleagues (Becker & Riel, 2000).
- integrate innovative methods in students activities in a more productively.
- accept the right stimulus from the community in order for their didactic practice to evolve more naturally via collaboration activities within the community.
- transform an educational experience into a qualified application, by describing the authentic content of this experience to the members of the community.

- develop apprenticeship relations between newcomers and experienced teachers and educators.
- create a shared repository of collective knowledge and experience, which can be used as a mean for life-long learning and training on existing and tested teaching innovations in real school settings.

Moreover, it must be clearly stated that despite the obvious advantages and benefits that web communities may offer, there are still many objective difficulties for their holistic and successful acceptance and use (Sofos & Kostas, 2010), arising from theoretical aspects to practical design issues, facilitation schemes, members communication models, personal motivators and legal and ethics issues.

Finally, this work may serve as a stimulus for further research on *Internet-mediated Educational Communities* in order to investigate their potential integration within Greek educational system.

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Appendix A

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|-------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1. www.e-paideia.net * | 14. www.mathima.gr | 28. www.daskalos.edu.gr |
| 2. www.sckool.gr | 15. www.ratemyteachers.gr | 29. www.creteportal.sch.gr |
| 3. www.epyna.gr * | 16. www.sxolio.eu | 30. http://eclass.sch.gr * |
| 4. www.netschoolbook.gr | 17. www.alfavita.gr | 31. www.tetradio.gr * |
| 5. www.diktyo.kedke.gr * | 18. www.edra.gr * | 32. www.e-yliko.gr * |
| 6. www.e-enosh.gr * | 19. www.pedia.gr | 33. http://schoolnet.proto.voulia.gr * |
| 7. www.eduportal.gr * | 20. www.thranio.gr | 34. www.kpe.gr * |
| 8. www.etwinning.net/el * | 21. http://e-emphasis.sch.gr | 35. http://wikignosi.proto.voulia.org * |
| 9. http://logogreekworld.ning.com * | 22. http://physics8th.ning.com * | 36. http://www.youschool.gr /* |
| 10. www.e-diktyo.eu * | 23. www.e-selides.gr * | 37. http://schoolbits.blogspot.com /* |
| 11. www.sch.gr * | 24. www.el-sxolio.gr | |
| 12. http://scienceteachersnet.ning.com * | 25. www.e-daskalos.gr | |
| 13. http://ylikonet.ning.com * | 26. www.pekp.gr * | |
| | 27. www.edugate.gr | |