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The Creative Exploitation of Pedagogy's Added Value in the Blogosphere to the Field of Early Childhood Education

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Author's contribution

The sole author designed, analyzed and interpreted and prepared the manuscript.

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ABSTRACT

This article highlights the popularity of the pre-school blogosphere and examines it as part of its creative exploitation, at a theoretical level, suggesting a version of the creation of a knowledge hub in the field of early childhood education. It develops a proposal to create a knowledge hub with inspiration derived from the study of Greek-speaking blogosphere of early childhood education. It approaches the blogosphere as precursor of knowledge hub in the field of early childhood education. The article describes the characteristics of the blogosphere, while it attempts a conceptual approach of the knowledge hub. Within a creative future perspective, it presents the potential benefits for educators. Finally, it proposes a model of development of a knowledge hub for early childhood education.

Keywords: Early childhood education; creativity; blogosphere of early childhood education; blogs in education; knowledge hub.

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1. INTRODUCTION

In the last three decades, globalization has played the most catalytic role in change. The evolution of new technologies has enabled the emergence of global production networks [1]. The incremental developments in informational technologies and especially in social media, the shift to a knowledge economy and the increased flow of people, knowledge, capital, values, services, goods and technology across borders are embodiments of globalization forces [2].

The rapid growth of the internet, particularly through the development of Web 2.0., has enabled the user to participate interactively. Notably, has provided access to the views and opinions of a wide range of individuals, opening up opportunities for new forms of communication and knowledge formation. With the rapid development and increase in network technology, communication and interaction with others, the creation and sharing of knowledge is supported and facilitated more effectively. Internet and web 2.0 tool technologies have long allowed learners to interact, collaborate, and connect with information in such a way that "learning landscapes are networked, social, and technological" [3]. This technological evolution has transformed the way people attain, use, and save the information. Information access has become increasingly mobile with smart phones and tablets providing immediate and simultaneous connections to news, social media, and other information tools. The important number of data creates the necessity of new kinds of competencies, like being able to track, to connect and to deal with all this information critically. Modern society, with its rapid scientific and emerging technologies, has performed an exponential rise in accessible knowledge. Remarkable capabilities are considered ones like critical thinking, trustworthiness, consistency, validity and information access. It is the shift from "Knowledge-Transfer" to "Knowledge Generating".

Siemens [4] by taking into account the technological basis of how we interact as a society, proposes the theory of connectivism as a new approach to learning, in a digital age [4,5]. It is a suggestion of how the process of learning changes in context with social media and social Network Technologies. Connectivism is a theoretical framework which views learning as a networking phenomenon influenced by emerged technologies and inherent tension of socialization [4].

According to the theory of connectivism, learning can be developed through tools which support and enable social and participatory practices such as user-generated content, sharing, peer criticism, aggregation, and personalization among learners. Connectivism has shifted the importance from the notion that learning occurs solely within a person, to emphasize the importance of connections between various sources of information, or nodes. This kind of nodes structures an always-expanding and developing knowledge network [4,5].

Siemens [4] proposes a learning approach, based on the technological development in the field of communication, which allows for constant adaptation through current information accessible through connections. Participation in network activities results in the creation, removal or adjustment in strength of connections. Learning occurs through the construction and traversing of networks and emerges from the connections that are formed during network activity. According to the perspective of connectivism, knowledge is generated in and through learning networks.

Connectivism claims that knowledge is distributive, as it consists of networks of connections resulting from experience and interactions between users, societies, organizations and the technologies that link them. Networks are connections among various entities such as experts, databases, blogs, colleagues, and websites. It is argued that the use of collaborative and social tools to enhance connections, such as using tools like YouTube, Twitter, wikis, blogs, management systems, and podcasts to deliver online instruction, provides learners with the opportunity to learn autonomously, but then share new knowledge with peers [6]. Software such the above, which are socially oriented, enable learner collaboration and stimulate the learning process [7]. In connectivism the starting point for learning occurs when knowledge is emerged by learners connecting to and participating in a learning community. Learning communities are defined as ''the clustering of similar areas of interest that allows for interaction, sharing, dialoguing and thinking together'' [4].

At the same time and as a result of this, has been developed the tendency of "Hub" which is a concept in network science that refers to a node with a number of links that greatly exceeds the average. Emergence of hubs is a consequence

of a scale-free property of networks. In the context of this paper, we will deal specifically with the “Knowledge Hubs”, which refer to localities with high internal and external networking and knowledge sharing capabilities. The recent emergence of regional education hubs is related to the important development in the internationalization of higher education and the key role that higher education plays in the knowledge economy [2]. But to date, there is no definition of an education or Knowledge Hub, there are no indicators or even characteristics, and there is no assessment of what makes a hub successful and sustainable. In short, there has been little analysis of these new cross-border education developments [8].

2. BLOGS IN EDUCATIONAL PROCESS

Blogs are included in those technologies that could support an interactive and intercreative engagement to the professional development of educators. Their popular spread is attributed to their usability [9]. It has been argued that blogs afford the opportunity to asynchronously converse with others, to share resources and to find tools, and to create communities of practice that could lead supporting the ongoing professional development of teachers [10]. Blogs’ technology is particularly suitable blogs, the more useful tool, especially in cases where there is no strong sense of group belonging or loyalty [9]. Blogging from educators generates the distributed, collective, and interlinked world of blogosphere which focuses on early childhood education.

Since educators engage in blogging, as a socially driven public written reflection, they can change the dynamic of teaching rhetorical sensitivity and reflection [9]. Blogs contribute to the enhancement of interactivity among blog users and promote the culture of collaboration [11]. They contribute to stimulating a burst of exchanged ideas in the pedagogical practice. They constitute a feedback field in educational activities. They reflect the professional path of the teacher, a kind that could be compared with Portfolio. They have their own contribution to culturally relevant pedagogy [12]. They combine the feedback of personal esteem and social interaction [13].

The use of blogs by teachers shows that it reinforces the critical discussion of key issues promotes interaction and shapes positive attitudes on various issues related to the educational process and helps them to better manage complex situations [14,15]. Their utilization multiplies the educational experience [9]. A personal blog is a kind of "rostrum" which could affect the developments in pre-school education. They activate to teachers an interactive and inter-creative participation in the educational process [9].

Blogs in the education process began to disseminate through the need to manage problematic situations of education, they emerged as a natural "reaction" in the learning process [16].

The exploitation of blogs by teachers assists them in creating a professional development area, characterized by cooperativeness, flexibility, democratic spirit, dialogue, the "society" of ideas, deep analysis and understanding of the issues, the breadth of spirit, exploration, the implementation of opinion and widening the professional "horizon" [16].

Since blogs focus their interest on pre-school education, the result of the interaction will be the renegotiation of educators' pedagogical views. The online community, which might start up around a blogger, would encourage that person to continue writing [17]. This feature would encourage the pedagogical reflection of the educator.

Some of the possibilities offered by blogs in education are a reflection of teaching experiences, categorized descriptions of resources and methodologies for teaching, regarding professional challenges and teaching tips, a collaborative space for educators to act as reviewers, a development of an educator’s portfolio of work [9]. Walker [18] believes that "creative interaction with one’s own development helps to ensure that new knowledge is incorporated in, and integrated with existing knowledge". This procedure performs successfully the logic of blogs through interaction with reflective comments from other members, which could suggest additional considerations and explorations of the idea presented and promote deeper engagement. This has the potential to encourage reflection, deep learning and effective professional development. Furthermore, blogs support the self-assessment of teachers and the authenticity of their practices [9,19].

Researchers are approaching a blog as a space where discourse can occur between learners,

between learners and instructors, as well as between learners and the larger Internet community [20]. In the case of a blogger educator, the blog would be a framework of reflection, open to all collaborators of children's education, such as parents and scientists. Blogs also provide them with a space where reflection and commentaries could be organized. It is argued that this allows bloggers to observe their own changes and growth in thinking and as a result, allows them to better reflect on their own learning [21]. Blogs could assist the users to understand better the topics, organize better their ideas, and consolidate knowledge [22]. A blog is available to anyone for free. Each educator could work on his/her own blog to communicate with other peer educators. A sense of ownership of a task increases the likelihood of successful online communications [23]. In addition, the sense of ownership could help bloggers reduce anxiety of participation in online communication [24].

3. BLOGOSPHERE FOR EARLY CHILD-HOOD EDUCATION IN GREECE

In recent years we have observed in Greece more and more educators of preschool education using the Internet to support their work. As a result this has an intense presence of blogs, related to the education of preschool children. In this research, an attempt is being done to study these blogs, focusing on the Greek-speaking blog, originating mainly from Greece and Cyprus. All the blogs included in the study are defined, conventionally, for research purposes, as "Greek Blogosphere for Early Childhood Education" (GBECE). The term "blogosphere" is perceived, as it is also widely accepted, as the aggregate of "blogs" and their interconnections in the sense of community [25].

Our approach covered the period from 2007 until the end of 2014. 224 blogs were found, whose bloggers were early childhood educators. From these 203 (92%) were active for up to January 2015. A percentage of 74% was related to individual blogs, while 26% had a collective character which accounted kindergartens or pre-school centers.

GBECE created gradually over the period from 2007 to 2014 (see Fig. 1), with an increasing trend. As a percentage of 77% blogs contribute to the interconnection of the blogosphere, they also contain hyperlinks to others related to preschool education.

A percentage of around 89% of blogs utilize technology of "Tagging" that provides a useful way to group related posts together and to quickly tell readers what a post is about. Tags also make it easier for people to find their content. The impact of the blogosphere in the area of preschool education emerges from the extremely high level of site visits, which is recorded in total 117.158.000 page views. The traffic concerns 431.000 topics which lead to 47.497 feedback comments. The dynamics described above are suggestive of the influence of the GBECE to the early childhood education in Greece. It is a type of pedagogical think tank for preschool education, which gives a pedagogic capital, whose exploitation is requested.

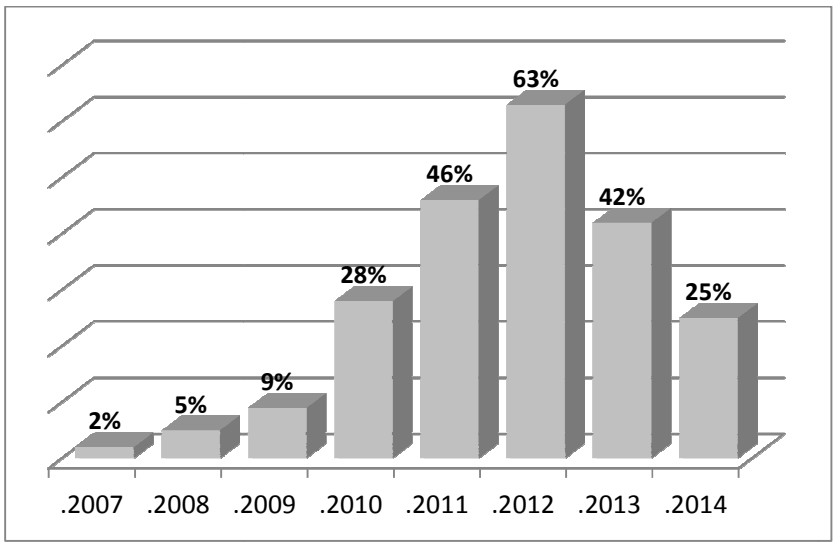

Fig. 1. Distribution of created blogs per year

It is expected that the shared-blog serves as a centralized system where educators are required to go to the shared blog (i.e., hub site) to communicate with their peer educators. If educators of early childhood education were characterized by extroversion and involvement in the blogosphere, the necessary condition would arise and would create the momentum which could progress pedagogy of preschool education.

4. TOWARDS A DEFINITION OF EDUCATION HUBS

Knowledge hubs are innovative systems, nodes in networks of knowledge production and knowledge sharing. Education hubs are new developments and a modern trend. A knowledge hub could be a digital repository of knowledge or a platform for dynamic learning environment. Education hub is more oriented to increased higher education opportunities for students, education and training to build a skilled workforce, or the production of knowledge and innovation.

They are characterized by high connectedness and high internal and external networking and knowledge sharing capabilities. The term ‘‘hub’’ refers to the knowledge sharing and dissemination aspect. It is characteristic of knowledge hubs that other knowledge hubs are also accessed and knowledge is shared throughout a knowledge network. Further, the resilience and strength of a knowledge hub seems to rest in its connectivity. In the most prevalent form of the hub, it specializes in producing new knowledge and innovation.

The creation and development of a knowledge hub is governed by constructivist principles. This could be seen as the way to be built through collaborative technologies. A hub is more than a coincidental interaction or collocation of actors working in the education and knowledge sectors. There is added value when the actors are connected, collaborate, or share common facilities and resources [26]. Processes of the creation, acquisition, diffusion, and deployment of knowledge are at the core of these functions, hence the terminology of knowledge hub [27].

Collaboration is a key factor to building knowledge and innovation hub and providing added value for the major actors. The nature and number of the interactions are unlimited. Through knowledge hub, Digital Media and Technology are utilized to enhance organizational and professional knowledge, culture and development. Knowledge hub enables users to link and aggregate multiple conversation and data sources.

Knowledge hubs perform three major functions, to produce knowledge, to spread knowledge to sites of application, to transmit knowledge to other people through education and training [28]. Knowledge hub helps to build a knowledge and service-based economy and to educate and train skilled labor for knowledge/innovation [26]. The driving key objectives are to educate and train students to be skilled labor/knowledge workers for a knowledge and service based economy, to provide increased access to education and professional development as employees and to educate and train skilled labor for knowledge/innovation [8]. Thus pursued objectives such as to build a knowledge- and innovation-based economy, to build capacity of local research and development centers and to enhance soft power.

Knight [8] provides a broad definition for education\knowledge hub that emphasizes the hybridity of local and foreign actors: "An education hub is a planned effort to build a critical mass of local and international actors, strategically engaged in education, training, knowledge production and innovation initiatives". In many cases the concept of knowledge hub is similar to education hub. A new feature of some education hubs is the emphasis on knowledge production and innovation.

Education hub is a configuration of actors who are collaborating through networking or co-location to provide higher education, training and knowledge production for the benefit of the host country, region, scientific field and beyond [2]. This is a concerted and planned effort to build a critical mass of local and international education/knowledge actors strategically engaged in cross-border education, training, knowledge production and innovation initiatives and in order to strengthen its efforts to exert more influence in the new marketplace of education [26]. The concept of planned effort suggests that a hub is an intentional or structured project and would normally comprise a strategy, policy framework, and some public and private investment. In other words, a hub is more than a coincidental interaction or co-location of actors working in the education and knowledge sectors [2]. The characteristic of strategically engaged is central to the definition as it emphasizes that

there is a deliberate sense of interaction or relationship among the actors [26]. This means that an education hub is a planned effort, a master plan or overall strategy, along with the aligned policies and regulations, help lead to success and sustainability. This supports the important concept of "strategic" in the definition.

The term actor is used in an inclusive manner so as to cover providers, producers and users of the education, training, knowledge services and research centers [8,26,29]. Collaboration among the key players is a key factor to building a knowledge and innovation hub.

The perception of critical mass suggests that there is more than one actor and set of activities involved. A hub is different from individual cross-border activities as it brings these kinds of initiatives together into some kind of planned or coordinated project. The concept of critical mass intentionally goes beyond a random collection of cross-border activities as it denotes that there is a key combination of actors. They represent a new generation of cross-border education activities where critical mass, co-location and connection between international, regional and local universities, students, research institutes and private industry are key [2].

Three aspects are critical to the analysis of hub: scale, level of engagement and scope of impact. The first issue is ‘scale’, which refers to the magnitude or level of the hub such as city, zone or country or from a different approach based on identifying a scientific field. The second aspect involves the level of «engagement» or reaches for attracting actors to be part of the activities, services or products of a hub. The third aspect is the scope of "impact" or spread of influence and benefit of the education hub [2].

Knowledge hub builds a vibrant research, knowledge and innovation sector to lead them towards a knowledge-based economy. The Knowledge/Innovation hub broadens its mandate beyond education and training to include the production and distribution of knowledge and innovation. Actors include universities, research institutes, companies with major research and development activities, which cooperate so as to develop applied research, knowledge and innovation.

The hub caused also to effectively advance, distribute and recombine tacit knowledge. Most of the information on education hubs is grey literature [2]. Nonaka and Takeuchi distinguish between tacit and explicit knowledge [30]. Tacit knowledge is the extract experience gained through action, and the explicit knowledge that refers to knowledge stored and made available in books, databanks or other types of media. Michel Polanyi, in a work before long, emphasized that tacit knowledge is based primarily on doing, rather than cognition. A person can therefore ‘‘do’’ more than he or she ‘‘knows’’ [31]. Moreover, Botkin and Seeley estimate that eighty per cent of knowledge is tacit [32]. One of the most difficult tasks of knowledge management is therefore to facilitate the transfer of tacit knowledge into explicit knowledge or to transfer personal into organizational knowledge. In the professional development it is highlighted the role of tacit knowledge [32]. Knowledge hubs contribute not only to the formal or codified knowledge (that which can be written down, peer reviewed or examined), but also to developing and transferring tacit and embodied knowledge [27].

5. THE POTENTIAL BENEFITS OF KNOWLEDGE HUB FOR EDUCATORS

A Knowledge hub could support an interactive and intercreative engagement to the professional development of pre-school educators.

These technologies incite efficient practices such as collaborative content creation, peer assessment, formative evaluation of projects, individual as well as group reflection on learning experiences, and up-to-date information regarding changes in collaborative spaces. These emerging technologies both generate new demands on learning and also provide new support to learning.

As a working hypothesis we could argue that the establishment of a knowledge hub for early childhood education potentially could result in the following:

- ✓ Enables the educators to identify, record, and track their personal and professional development.
- ✓ Creates continuous conversation that fosters and supports a culture of continuous learning.
- ✓ Preserves and promotes organizational learning and innovation.
- ✓ Supports personal, professional development and knowledge sharing.

- ✓ Supports professionals to indentify and manage their own learning needs.
- ✓ Supports professionals to take responsibility for their own learning and development.
- ✓ Supports educators in their professional development and career progression.
- ✓ Collects, selects and reflects on the process and products of learning and development
- ✓ Provides flexible, continuous professional development and makes organizational knowledge and learning ubiquitous and accessible anytime and anywhere.
- ✓ Contributes to the professional development through self assessment.
- ✓ Promotes the linkage and the added value of information.
- ✓ Enhances knowledge retention and transparency of information.
- ✓ Exchanges knowledge, ideas, insight and experience.
- ✓ Develops a culture of sharing and collective thinking by empowering educators to share their knowledge and experiences.
- ✓ Promotes culture of coproduction and excellence.
- ✓ Contributes to innovation initiatives.
- ✓ Supports cross-sector collaboration and creative working.
- ✓ Transcends organizational barriers and facilitates communication across various organizations.
- ✓ Promotes and enhances inter-professional and interdisciplinary awareness, appreciation and collaboration.
- ✓ Facilitates cross-organizational exchange of information and a collaborative culture of problem solving.
- ✓ Creates a community of practice and different communities of interest able to foster a culture of coproduction and collective thinking.
- ✓ Gives the opportunity to the educator to interconnect to community of practice and communities of interest for support, sharing of information and collective and creative problem solving.
- ✓ Provides infrastructure for face to face forum.
- ✓ Creates a blended platform to support community of practice and communities of interest.
- ✓ Transmits to platforms that can support the objectives of a project or practice.
- ✓ Encourages and supports the creation of a community of practice and communities of interest.
- ✓ Generates added value for practitioners in pre-school education, through the consultation of experience.
- ✓ Taps into the power of sharing and social media, while maintaining the validity of organizations.
- ✓ Constitute a great sourcing tool that allows the organizational structures to be based on the collective intelligence of its people.
- ✓ Creates digital evidence [9,10,11,12,13, 16].

6. PROPOSAL: THE CASE OF DEVELOPMENT OF A KNOWLEDGE HUB FOR EARLY CHILDHOOD EDUCATION

The knowledge hub for early childhood education is proposed to create and to provide authenticated and validated knowledge. The blogosphere could be seen as a precursor of knowledge hub in the field of early childhood education.

We suggest knowledge hub in a “freemium” model with a view to animate the “free flow of information” concept, by making the knowledge hub available to any viewer —free. The knowledge hub is iterative and provides the most up to date material to a broad audience, at a low cost. The knowledge hub achieves to build a service- or knowledge-based economy in the field of early childhood education. It increases research capacity, and improves the overall excellence of an education system. More importantly, education hubs are also keen on developing human talent in order to compete in the global knowledge economy [29,33].

According to the experience derived from the literature, several actors, including universities, research institutes, companies with major research, and development activities, are attracted through favorable incentives to establish a structural base in the field and to collaborate with partners to develop applied research, knowledge, and innovation. The collaboration among the key players is a key factor to building knowledge and innovation hub and providing added value. The creation of knowledge hub requires substantial planning, policy preparedness, human resources, infrastructure and financial investment [26].

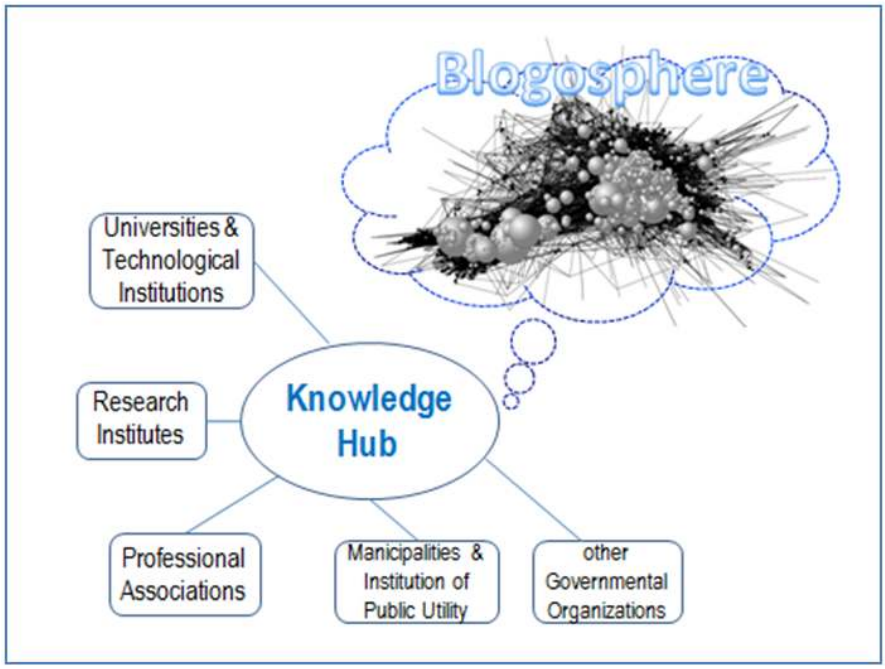

Fig. 2. Knowledge Hub Model

The data obtained from studying the Greek-speaking Blogosphere for Early Childhood Education, reflect the possibility of creating rich material for utilization in education of preschool children. Accordingly, it is revealed by educators, a slow but a steady development of appropriate culture which could support the project of creating a knowledge hub. On the other hand, deficiencies and requests in the area of preschool education, aspire to be solved through the creation of a knowledge hub.

The project can support the relevant departments of universities and technological institutes, research institutes, Municipalities & Institution of Public Utility, other governmental organizations and professional associations. It requires strategic planning, central coordination and investment funds. At the same time, willingness and the appropriate attitude of participants is needed. From the theoretical approach that was attempted, the knowledge hub is believed to be an investment in the knowledge base of the research field that will help solve many problems and promote early childhood education.

6.1 Is the "Knowledge Hub" a Creative Exploitation?

The concept of creativity involves the generation of new things or ideas or the transformation of those previously existing [34]. Creativity has been understood as the "ability to produce work that is both novel and appropriate" [35]. Craft [36] sees creativity as the ability to see possibilities that others haven't noticed.

Innovation has also been defined as the "intentional introduction and application within a job, work team, or organization of ideas, processes, products, or procedures that are new to that job, work team or organization and that are designed to benefit the job, work team or organization" [37].

A knowledge hub is an innovation, and given that it is supported creativity and innovation are obviously inter-related [38]. We believe that a knowledge hub emphasizes the need to encourage the development of educators' creative and innovative potential for several reasons: 1) the upsurge of new media and technologies that learners use in their everyday lives, can be exploited in creative and innovative ways and contribute to formal and informal learning, 2) the immersion in this media-rich environment leads new cohorts of educators to learn and understand in different ways, therefore teachers need to develop creative approaches and find new methods, solutions and practices, 3) creativity is a form of knowledge creation, therefore stimulating creativity has positive

spillover effects onto learning, supporting and enhancing self-learning, learning to learn and life-long learning skills and competences [38].

A knowledge hub is believed to be a creative intervention in the professional development of pre-school pedagogues because it creates an innovative field of professional development and thus contributes to an emphasis on the process instead of the product [39], it is a means addressing to the issues of the potential of everyone educator to become creative and to foster autonomy and it strengthens the ability to think creatively and to think 'outside of the box' [39].

7. LIMITATIONS

Despite our initial activities and the worldwide adoption of the knowledge hub, we are still in the early stages of knowing the ways these materials are being used to improve the purpose they serve. Therefore, studies on hubs must recognize the limitations and hazards of reproducing the rhetoric of ambitious blueprints. If hubs are going to be more than branding or marketing labels, it is imperative that further attention is focused on the actual measurement of outcomes and impact and we do not rely on statements of intention [40]. It also introduces new risks related to quality [40]. Finally, there is a lack of empirical applications and research data that could verify the success of such a project.

8. CONCLUSION

The rapid development of "Web 2.0" has placed a huge wealth of knowledge and experience in the internet. Internet is now a think tank, which can contribute to the evolution of all fields of science. The asset that will make progress is to exploit the wealth of its content. Properly structuring and organizing its contents, through targeted interconnection, could create added value that would contribute to the development of science. This WEB contribution would be of particular importance in more traditional fields such as the early childhood education, which is dominated by traditional principles and resists the use of new technologies. However, the participatory dimension of WEB 2.0 has already created a huge material that involves and contributes to the education of preschool children. According to this theoretical approach, the principle of the required formation and presentation of the content goes through the blogosphere of early childhood education. It was attempted to determine the expansion of the blogosphere in Greece and, against its unpredictable growth, it is proposed to create a «Knowledge Hub" that will use its content and give it the pedagogical added value that will contribute to the development of the field of early childhood education. It is theoretically argued that this initiative will make a significant contribution to the development of preschoolers' education.

COMPETING INTERESTS

Author has declared that no competing interests exist.

REFERENCES

1. Coe N, Hess M, Yeung HWC, Dicken P, Henderson J. Globalizing regional development: A global production networks perspective. Transactions of the Institute of British Geographers New Series. 2004;29: 468-84.
2. Knight J. Education hubs: International, regional and local dimensions of scale and scope. Comparative Education. 2013; 49(3):374-387.
3. Dunaway MK. Connectivism: Learning theory and pedagogical practice for networked information landscapes. Reference Services Review. 2011;39(4): 675-685.
4. Siemens G. Connectivism: A learning theory for the digital age. International Journal of Instructional Technology and Distance Learning. 2005;2(1):3–10.
5. Downes St. An Introduction to Connective Knowledge; 2005. Available:http://www.downes.ca/post/33034.
6. Mallon M. The new distance learners: Providing customized online research assistance to urban students on the go. Urban Library Journal. 2012;18(1). Available:http://ojs.gc.cuny.edu/index.php/urbanlibrary/article/view/1351/1417.
7. Churches A. Bloom's Digital Taxonomy. Edorigami Wikispaces; 2008. Available:http://edorigami.wikispaces.com/file/view/bloom%27s+Digital+taxonomy+v3.01.pdf
8. Knight J, Morshidi S. The complexities and challenges of regional education hubs: Focus on Malaysia. High Educ. 2011;62: 593–606.

9. Duffy P, Bruns A. The use of blogs, wikis and RSS in education: A conversation of possibilities. In Proceedings Online Learning and Teaching Conference 2006, Brisbane. 2006;31-38.
10. Hungerford-Kresser H, Wiggins J, Amaro-Jimenez C. Learning from our mistakes: What matters when incorporating blogging in the content area literacy classroom. Journal of Adolescent and Adult Literacy. 2011;55(4):326-335.
11. Du HS, Wagner C. Weblog success: Exploring the role of technology. International Journal of Human–Computer Studies. 2006;64(9):789-798.
12. Brown-Jeffy S, Jewell E. Cooper. Toward a conceptual framework of culturally relevant pedagogy: An overview of the conceptual and theoretical literature. Teacher Education Quarterly. 2011;38(1):65–84.
13. Richardson W. Blogs, wikis, podcasts, and other powerful Web tools for classrooms. Thousand Oaks, CA: Corwin Press; 2006.
14. Amaro-Jimenez, Carla. Service learning–Preparing teachers to better understand culturally and linguistically diverse learners. Journal of Education for Teaching. 2012;38(2):211–213.
15. Hsu, Hui-Yin. Preparing teachers to teach literacy in responsive ways that capitalize on students' cultural and linguistic backgrounds through weblog technology. Multicultural Education and Technology Journal. 2009;3(3):168–181.
16. Alcaraz-Salariche N, Gallardo-Gil M, Herrera-Pastor D, Serrán-Nuñez M. An action research process on university tutorial sessions with small groups: Presentation tutorial sessions and online communication. Educational Action Research. 2011;19(4):549–565.
17. Blood R. The weblog handbook: Practical advice on creating and maintaining your blog. Cambridge, MA: Perseus Publishing; 2002.
18. Walker D. Writing and reflection. In D. Boud, R. Keogh, & D. Walker (Eds.), Reflection: Turning experience into learning. London: Kogan Page; 1985.
19. Tapscott D. Growing up digital. The Rise of the Net Generation. New York: McGraw Hill; 1998.
20. O'Donnell M. Blogging as pedagogic practice: Artefact and ecology blog talk down under. Sydney, Australia; 2005.
21. Zeng X, Harris ST. Blogging in an online health information technology class. Perspective in Health Information Management. 2005;2(6).
22. Brescia WF Jr, Miller MT. What's it worth? The perceived benefits of instructional blogging. Electronic Journal for the Integration of Technology in Education. 2006;5:44–52.
23. Tolmie A, Boyle J. Factors influencing the success of computer mediated communication (CMC) environments in university teaching: A review and case study. Computers & Education. 2000;34: 110-140.
24. Pena-Shaff J, Altman W, Stephenson H. Asynchronous online discussions as a tool for learning: Students' attitudes, expectations, and perceptions. Journal of Interactive Learning Research, 2005;16(4): 409-430.
25. Ferdig ER, Trammell DK. Content delivery in the 'Blogosphere'. Journal of Educational Technology. 2005;1(4).
26. Knight J. Education hubs: A fad, a brand or an innovation. Journal for Studies in International Education. 2011a;15(3): 221–240.
27. Youtie J, Shapira Ph. Building an innovation hub: A case study of the transformation of university roles in regional technological and economic development. Research Policy. 2008;37: 1188–1204.
28. Evers HD, Gerke S, Menkhoff Th. Knowledge clusters and knowledge hubs: Designing epistemic landscapes for development. Journal of Knowledge Management. 2010;14(5):678-689.
29. Knight J, Lee J. Three types of education hubs: Student, talent and knowledge. In J. Knight (Ed.), International education hubs: Student, talent, knowledge-innovation models (29–42). Dordrecht: Springer; 2014.
30. Nonaka I, Takeuchi H. The knowledge-creating company: How Japanese companies create the dynamics of innovation. Oxford University Press, New York, NY; 1995.
31. Polanyi M. The Tacit Dimension, Anchor Books. New York, NY; 1967.
32. Botkin J, Seeley C. The knowledge management manifesto: Why KM requires community-building. Knowledge Management Review. 2001;3.
33. Cheng KM. Developing education beyond manpower. New York: United Nations Development Programme; 2010.

34. Chávez-Eakle RA. The relevance of creativity in education. New Horizons for Learning. 2010;8(1).
35. Sternberg RJ, Lubart TI. The concept of creativity: Prospects and paradigms. In R. J. Sternberg (Ed.), Handbook of Creativity (3-15). Cambridge: Cambridge University Press; 1999.
36. Craft A. Creativity in schools: Tensions and dilemmas. London: Routledge; 2005.
37. West MA, Richards T. Innovation. In M. A. Runco & S. R. Pritzker (Eds.), Encyclopedia of creativity (45-56). San Diego, Calif. London: Academic; 1999.
38. Ferrari A, Cachia R, Punie Y. Innovation and creativity in education and training in the EU member states: Fostering creative learning and supporting innovative teaching. Report of JRC-IPTS European Commission, 2009.
39. Runco MA. Creativity: Theories and themes: Research, development, and practice. Amsterdam; London: Elsevier Academic Press; 2007.
40. Knight J. International education hubs: Emerging models in Asia, Africa and the Gulf States. Dordrecht, Netherlands: Springer Publishers; 2013a.

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