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The new world is upon us and the major driving force in this world is knowledge

Networked Learning: Negotiating Knowledge in Open Education

In an interconnected, globalized world, knowledge has become a resource of critical importance. To maintain economic competitiveness, contemporary societies have become increasingly dependent on the creation, dissemination and use of knowledge. In *Knowledge Societies* [Stehr, 1994], knowledge creation and innovation are *pervasive* [Scardamalia&Bereiter, 2003]. Strategic position of knowledge in contemporary world brings about far-reaching repercussions for education and work life. To handle knowledge-intensive environments, educational practices have to be focused on learners being active agents in knowledge creation as *among 21st century capabilities, the ability to create knowledge is paramount* [Zhang, Scardamalia, Reeve & Messina, 2009, p. 8].

The emergence of new learning landscape

One of the consequences of massive deployment of information and communication technologies is the development and widespread use of media networks. From 1980s onwards, modern societies constitute *Network Societies* [Castells, 1996; Van Dijk, 2012]. Networks based in new media have become powerful arenas for information diffusion and discursive practices. Yet, as UNESCO experts observed, *the growth of networks alone will not be able to lay the groundwork for the knowledge society* [UNESCO, p. 19]

Both information and social discourse on Internet are distributed. To handle this distribution, networking competencies are in high demand as a rational and purposeful use of network is the value added here.The ability to manage distributed resources by itself will not answer the emerging challenges.Networks are dynamic, fluid and subject to constant change. The core competence for tackling networked resources is the competence of networked learning.

*Networked Learning*is defined as *learning in which information and communication technology (ICT) is used to promote connections: between one learner and the other learners, between learners and tutors; between a learning community and its learning resources* [Goodyear, Banks, Hodgson & McConnell, 2004, p. 1]. Presented definition places emphasis on technology-mediated connections between elements of the process and implies interactions between human agents (Fig.1).

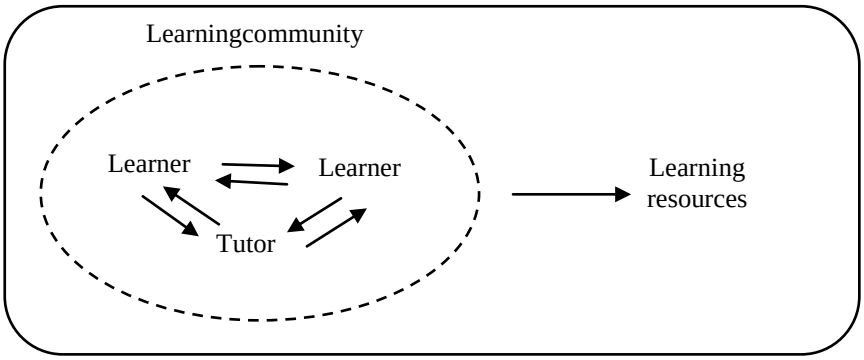

Figure 1. ICT-supported networked learning

Source: prepared by the author

Within the configuration of interconnected interactions, traditional status of knowledge as a *state* is subject to transformation towards the status of knowledge as an *action*. Networked learning is situated, contextual and socially mediated. This characteristic locates learning as a process of becoming a proactive member of learning community and transfersthe outcome of learning from the *acquisition metaphor* to *participation metaphor* [Sfart, 1998, pp 4-13].

Viewing learning as integration with a communityin action is not a novel approach. Social vision of learning has been conceptualized within a number of theoretical frameworks. Among the most representative examples are the theory of situated learning [Lave & Wenger, 1991], the theory of distributed cognition [Salomon, 1993] andthe discursive paradigm [Harre & Gillet, 1995].However, one paradigm is not enough to account for and exhaust the potential of networks for learning.The development of social mediaand mobile systems have empowered the potential of Internet with new and unprecedented opportunities. On-demand access to any content and interactive user interface enablenot only creative participation in network debate but also individual expansion. Individuals acquired extensions in the form social networks and social networks increased their diversity and fragmentation. We are witnessing the rise of *networked individualism*, a new *modus operandi* for the world of networks. Individuals as the autonomous centers interact with numerous and diverse others to create new efficiencies and affordances. It is argued that *networked individualism* is a new *social operating system*acting as an intermediary between the network and its components [Rainie & Wellman, 2012].

Technology-rich environments will not enhance education by themselves. However, technology-mediated practices with focus on learning may reach this goal. Scholars in the field of networked learning put forward an argument that *technology enhances learning through transformed social practices* [Hakkarainem et al. 2006, Hakkarainem, 2009]. This perspective stems from the *knowledge-building*framework [Bereiter & Scardamalia, 2003] and lays special emphasis on collective advancement of knowledge and cultivation of knowledge practices. The question arises how to assist solutions for networked learning in defining the balance between the collective agency and the individual agency. How to reach

reciprocal advance of knowledge in collective effort and at the same timemaintain the equilibrium where a sense of *we* does not supersedes the sense of *I?*

Learning in networks: question about the essence

In the rapidly changing and technological world, much of education takes place outside traditional educational fora. Access to education has been significantly broaden by various formats of ICT-supported distance education:e-learning courses, opencourseware and recently developed MOOCs (massive open online courses). Apart from environments designed by educators, Internet hosts magnitude of informal learning arenas such as Personal Learning Networks and Professional Learning Networks, which develop spontaneously and outside the influence of instructional design. New educational environments obviously expand opportunities for learning. Simultaneously, they bring about the challenge of relevant learning skills.

Virtual Learning Environments (VLE) increasingly rely on network both in technological and human sense. In their domains, competences required for networked learning appear crucial for learning outcomes. The main thesis in this paper is that networked involvement of learners constitutes the key success factor for the full utilization of educational opportunities in online settings.

New classes of social media on the wider web continue to transform the ways virtual learning environments operate. VLEs are becoming more and more distributed and dependent on new type of social practices where networked individualism constitutes important characteristics. Therefore, attention should be directed towards elaborating on solutions where collective effort to build knowledge could be genuinely combined with personalized learning experience and where both practices could be truly complementary, inspiring and motivating for each other. Online learning environments provide fertile ground for this type of union. They are flexible and open. Learners may freely shape their dynamics as long as they are willing to get involved in this type of activity and as long as they are ready to take initiative to create personalized extensions of what is designed for them by educators within the formal context of Learning Management Systems (LMS). To succeed with such approach learners need to be self-directed and self-initiated in the processes of creating their own individual learning spaces, their personal learning networks (PLN), which would suit their individual learning preferences and needs. The combination of engagement in social practice of learning within formal context (LMS) and social practice of learning in a personalized informal context (PLN) may bring unexpectedly good results. Figure 2 presents the described model of interconnected networks of learners.

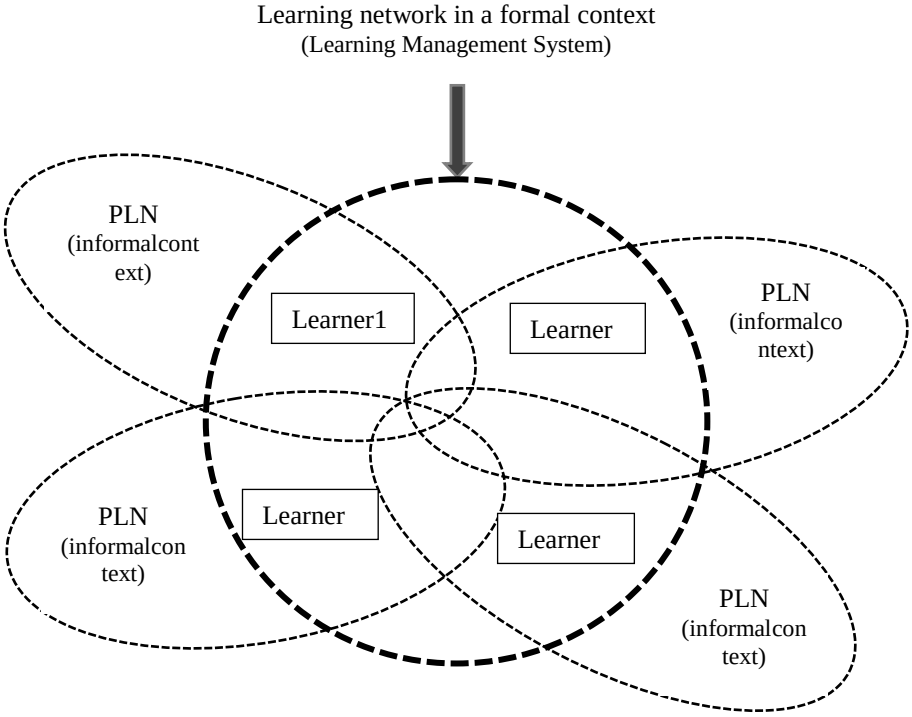

Figure 2. Interconnected networks of learners

Source: prepared by the author

The author believes that success in implementing the model of interconnected networks of learners to educational practice in virtual environments may contribute to raising the level of engagement in online studies and consequently make them more rewarding and fruitful.

Closing remark

As George Siemens points out, knowledge isa river not a reservoir. *Certain types of knowledge may still pool (much like types of knowledge are hardened through expert validation and public consensus). With ongoing development of technology, cross-industry collaboration, global connectedness and competitiveness, more and more knowledge moves with river-like properties* [2006, p. 53].In the Knowledge Age, knowledge is in the state of flow, which is triggered,directed and maintained bysocial processes of co-creation and communication. Social aspects of knowledge practices and discursive nature of knowledge itself have never been so prominent.

Sustained connections and the ability to control one's own learning experience are growing into key prerequisites for participation in knowledge environments. The ability to consolidate knowledge communities and determination to preserve knowledge discourse

emerge as crucial attributes for both educators and learners. *Knowledge societies will have to be societies of shared knowledge* (UNESCO, 2005). This may truly happen through the creation of knowledge cultures with norms and rules negotiated towards sense making in networked settings. Learning and knowing are connection-based processes. We may enhance them further by combining and coordinating collective efforts with individualized contributions. The theoretical construct of interconnected networks may well provide the framework for such solutions.

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