Reflecting on the Use of Technology for Higher Education

*Ofelia Veltri**
Universidad del Salvador
Argentina

"We have seen unimagined developments in how we can communicate and express our opinions anytime and anywhere through social networking. The challenge going forward is to understand how these technological developments can be used in the service of the ideals and values of higher education."

Garrison

The growth of e-learning is unprecedented, challenging yet disruptive: a new era in higher education that demands prompt action and a clear vision. The impact of this phenomenon cannot be overseen by educators as it may seem to be similar to the changes the invention of the printing press brought around. This reflective approach to the issue under analysis will emphasize the relevance of asynchronous communities of inquiry (CoI) leading up to collaborative knowledge as the key to transform higher education and create effective and mindful learning.

Higher education and its educational leaders are entering the age of "technological adolescence" (Garrison, 2011) after having accepted the pressure to address the relevancy of technology and the quality concerns implied. One of the roles of researchers is to provide them with appropriate educational tools (aided by technology) so that the stage of adulthood may be reached. And it is precisely what a group of

* Doctora en Lenguas Modernas por la Universidad del Salvador (USAL). Magíster en Gestión Educativa por la Universidad de Nottingham. Magíster en Lingüística Aplicada por la Universidad de Kent. Investigadora de la USAL. Correo electrónico: ofeliaveltri@gmail.com

researchers (included the writer of this paper) at Universidad del Salvador has undertaken to do: research on communities of inquiry (CoI) as a tool to ensure the development and acquisition of cooperative knowledge.

Concepts are seldom new, they usually emanate from previous philosophical analysis, as it is the case with the communities of inquiry. It is a concept that originated with J. Dewey (1933) and has been taken up by different researchers at different stages in the development of education. Garrison *et al.* (2003, 2009, 2011 and onwards) and Haythornwaite et al. (2011) have been conducting field research and have come up with clear guidelines on how to incorporate CoI to everyday academic life.

Individual knowledge construction, no matter how rich it may be, does not exist if it is not shared and communicated. When individuals get together in an organized way (CoI) they exercise their critical thinking and construct, enlarge and validate this knowledge; the fusion of the individual world with a shared world is the foundation of a community, thus taking us back to the core and roots of higher education.

An educational community of inquiry is made up of a group of individuals who collaboratively engage in the creation of knowledge (by sharing individual information, experience and knowledge), who develop their critical thinking and reflection to construct meaning and define understanding and who basically interact socially online. It is a deep and meaningful learning experience achieved through three interdependent elements: social, cognitive and academic (the latter exercised by the coach/leader).

The interaction of the three components will determine the success of the results. The social component represents the ability of the participant to interact online, communicate purposefully and develop personal relationships. Establishing social presence when the medium is the written word online may prove to be a difficult task, but by using the right online communication strategies, the social bond is created, thus enabling members to project their personal characteristics into the CoI.

The cognitive presence, which Garrison *et al.* (2000) define as "the

extent to which the participants in any particular configuration of a community of inquiry are able to construct meaning through sustained reflection and discourse," is crucial to the development of critical thinking and meaning construction.

The third component (academic or group management) is usually in the hands of the academic leader of the CoI and covers the categories of design and organization of the community, the facilitating of discourse and the giving of direct instructions. It is a key element in the facilitation and direction of cognitive and social processes within the CoI.

The academic relevance of working with communities of inquiry in higher education is by now firmly established as results obtained in various universities have shown deeper involvement of staff and students, greater relevance of academic findings (shared knowledge) obtained and a strengthening in social interactions. The information available through the Web is vast and far-reaching, impossible to grasp and process by any individual, a problem that can only be solved by the creation of communities that think critically, reflect collectively and arrive at shared knowledge enriched by individual social and cognitive inputs.

The two-year research being conducted at the Universidad del Salvador, School of Modern Languages, has organised two communities of inquiry with second year students and the main objective is to assess and evaluate participation as a social component; asynchronous active participation would appear to be a special challenge in creating the social component in a CoI. Some of the indicators that will be considered are self-projection and expression of emotions, group identity and collaboration, participation in discussion forums, quality of the participation, use of conventional and unconventional means of expressing feelings, references to humour, goodwill, respectful questioning and answering.

The failure in establishing the right social environment may result in the failure to work towards obtaining the required written input that reflects collaborative knowledge. Critical thinking and reflection are aided and supported by the appropriate communication; the role of the

instructor (coach or CoI leader) is thus crucial in proposing different indicators on how to socialize online.

As a future development, a CoI may establish links with another CoI so as to perfect the knowledge obtained by one of them or enlarge its scope. The grouping of two or more CoIs may lead to interesting results in achieving yet deeper knowledge. This is definitely the role of higher education: the constant improvement of knowledge acquisition and creation.

References

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