INTRODUCTION

Inquiry into 'Communities of Inquiry': knowledge, communication, presence, community

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The Community of Inquiry framework, originally developed to describe learning activity in threaded online discussion forms, has had a relatively long and illustrious history – particularly as far as timelines for e-learning and digital media are concerned. This framework has its origin in a series of articles authored by Garrison, Anderson, Rourke and others around the turn of the century. These researchers understood 'educational communit[ies] of inquiry' as being 'group[s] of individuals who collaboratively engage in purposeful critical discourse and reflection to construct personal meaning and confirm mutual understanding' (Garrison, 2011, p. 15). These same researchers believed that deep and meaningful learning occurs in such a community through the balanced interaction of three communicative elements or forms of 'presence': cognitive presence, social presence and teaching presence. The model is also based on a cyclical process of experiential inquiry, which begins with a triggering event or question, and proceeds through processes of exploration, integration and resolution. The model that incorporates these processes and 'presences' has subsequently been developed in a number of different directions, particularly as evidenced in the design and application of a Community of Inquiry Survey (e.g. Aubaugh et al, 2008), and in the publication of two monographs focusing on e-learning and blended learning: *E-Learning in the 21st Century: a framework for research and practice* (Garrison, 2011) and *Blended Learning in Higher Education: framework, principles, and guidelines* (Garrison & Vaughan, 2008).

Researchers have sought to both refine and operationalize the central constructs of the Community of Inquiry framework – specifically, cognitive, social and teaching presence – in a number of ways. In early work, this tended to be done through the analysis of transcripts of online discussions, and the categorization of communicative content as social, cognitive or pedagogical/instructional, or as triggering, exploratory, integrative and/or mutually confirming. Augmented by the 'Community of Inquiry Survey' and a number of other adaptations of the model to synchronous, non-textual and other instructional contexts, the three types of presence remain a central concern to this day.

As a result, in issuing the original call for papers for this special issue of *E-Learning and Digital Media*, we as co-editors placed special emphasis on revisiting the Community of Inquiry framework, and considering how it might be further developed and re-thought in the light of more than 10 years of application and research. This introduction provides an overview of the submissions included in this issue, showing how they are interrelated, and how they reconsider the model for different contexts of communal inquiry. Given the centrality of the three constructs of 'presence' for the model, it is not surprising that almost all the articles that appear in this special issue have one or more of these forms of presence as their focus. Also, given that technical and practical developments on the Web in the last 10 years have been dominated by an emphasis on

sociality and communication – moving from Web 2.0 to social networking – it is also not surprising that *social* presence receives the greatest attention in this issue.

The first article in this issue, 'Community of Inquiry: social presence revisited', analyses both the history and current use of this type of presence in a rigorous and detailed manner. Co-authored by Kreijns, Van Acker, Vermeulen and Van Buuren, this article first seeks to clarify the original definition of social presence. It is originally defined by Garrison and others both as the perception of another as a real person, and as the online accomplishment of identity, purposeful communication and interpersonal relationships. The authors begin by arguing, not at all implausibly, that at least two separate phenomena are designated in these definitions: (1) a perception of another (which they refer to as social presence per se), and (2) the activities of communicating identity and building relationships (and they term this second dimension of sociality 'social space'). Kreijns et al go on to suggest how this second definition might be operationalized in research using a modified Community of Inquiry survey. They then propose an elaboration of the Community of Inquiry model (which, as readers know, is rendered as a Venn diagram showing the three presences as overlapping circles with 'educational experience' or 'deep and meaningful learning' located in their common centre). Specifically they suggest that one of the three 'central' elements, social presence, might be replaced by social space, and that social presence be revised as a component that both underlies and supports this social space. The authors additionally suggest that elements called 'learning presence' and 'educational resources' might be seen as similarly underlying and supporting the central elements of cognitive presence and teaching presence, respectively.

Significantly, the work of Loewenthal, the co-author (together with Dunlap) of the second article included in this issue, is reviewed and referenced by Kreijns, Van Acker, Vermeulen and Van Buuren. Like the first article in this issue, Lowenthal is seeking to 'demystify' the meaning of 'social presence' for this research framework. And also like Kreijns et al, Lowenthal and Dunlap are seeking not only to clarify this construct, but also to show how it might be operationalized – again, specifically through reference to the survey instrument developed for the Community of Inquiry model. One of Lowenthal and Dunlap's concerns with the operationalization of social presence in the survey is the role of a sense of 'comfort'. This question seems particularly important since an impression of comfort is likely not to be dominant in the deliberative work required to arrive at consensual understanding.

The third and final article to take social presence as its principle focus is by Giesbers, Rienties, Tempelaar and Gijselaers. This article applies the construct of social presence specifically to web-based video conferencing, and finds that although video conferencing is indeed associated with increased social presence (particularly by enhancing the 'perception' of another as 'a real person'), this increased presence does not correlate with improved student performance. Unlike the previous two articles, which emphasize the multidimensionality of social presence as a construct, Giesbers et al rely primarily on the way that the experience of the presence of others has been defined according to 'media richness theory': as a kind of technologically-enabled manifestation of the physicality of the other. Predictably, they find through their survey that students do indeed experience others' presence quite directly in video conferencing contexts. What is less expected, however, is that no significant difference is found in student outcomes between those utilizing this video technology and those using less sophisticated technologies typically associated with lower degrees of social presence.

At the same time, the article by Giesbers et al, taken together with the previous contributions in this issue, raises some important issues or questions. First, the authors underscore the need for a more rigorous and specific definition of the phenomenon of social presence. Particularly at a time when social networking and social media still rely significantly on text and other forms associated with 'low' social presence, it is important to work towards clearer understandings of the relationship between sociality, mediation and communication. Second, a concern common to the three articles is their reliance on post-hoc information gathered through survey instrumentation, rather than on an analysis of content from online communication itself. If social presence is indeed a perception of the reality of others online, then it might well be measured through self-reporting of a student's own perceptions; however, if it is more closely related to relationship building and purposive communication, it might be better studied by an examination of participants' actual utterances, perhaps through network analyses and related techniques.

Redmond's exploration of 'Reflection as an Indicator of Cognitive Presence' seeks to elaborate and refine this second type of 'presence' in the Community of Inquiry model much in the same way that Lowenthal and Dunlap or Kreijns et al did in the case of *social* presence. Like both of these articles, Redmond identifies one aspect of the type of presence that is of central concern, and elevates its importance in an attempt to clarify the given presence construct more broadly. In Redmond's case, the aspect of cognitive presence is 'reflection', which is defined specifically in terms of metacognition on and discussion of learning content, outcomes and learning processes. Redmond provides evidence from a pilot study of this modified cognitive presence construct, and makes the case that this modification could address a number of issues commonly identified in the literature concerning the attainment of the higher or final stages of the communal and critical inquiry process.

The three articles that follow these theoretical and definitional explorations of social and cognitive presence revisit the original Community of Inquiry model by adapting and applying it to a wide range of different and often new educational settings and contexts. Kumar and Ritzhaupt offer a careful and what is likely to be a very helpful extension of the model, illustrating how it can be expanded from the level of the course or course unit (to which it is typically applied) to that of a set of courses constituting an entire programme. The value of this adaptation is particularly clear as the 'class' and the 'classroom' are made increasingly porous through the effects of social media, cohort-based planning and other developments in both curriculum and technology. As communication between and among students proliferates outside of institutionally hosted services, and as students remain in contact across classes and courses, the kind of expansion and extension of the original inquiry model that Kumar and Ritzhaupt explore may need to be considered by many others.

One important example of the way students are communicating outside of prescribed forums of inquiry (although not necessarily the most recent example) is provided by blogs. Although blogging is now an established phenomenon, it seems particularly attractive in formal education contexts because (among other reasons) of its mixture of individual and communal characteristics, and its reliance on textual communication. This makes the study of Pifarré, Guijosa and Argelagós, which adapts the Community of Inquiry model to class blogging activities, of particular relevance. Unlike some other studies featured in this issue, Pifarré, Guijosa and Argelagós gather data both via surveys and through the collection of online student communication during the course, using both qualitative and quantitative means of analysis. Although the scale of their study is rather small, it finds that many of the attributes of social, cognitive and teacher presence can be identified in a blogging context, and thus further suggests the ready applicability of the Community of Inquiry model to this Web 2.0 activity. Findings of a similar nature are reported in the article with which our special issue concludes. Otrel-Cass, Khoo and Cowie take the Community of Inquiry model even further than the previous article by applying it to an educational context that is blended, and that correspondingly involves online forums of a slightly different design than threaded asynchronous discussion forums familiar from Blackboard and Moodle learning management systems. Similar to Pifarré, Guijosa and Argelagós, Otrel-Cass and her co-authors find the Community of Inquiry model sufficiently flexible and adaptable for their purposes: the researchers are able to readily identify attributes of social, cognitive and teacher presence in the evidence gathered in their hybrid or blended educational environments.

Studies such as the two which conclude this special issue suggest that the Community of Inquiry model, having expanded and flourished over its first decade, is likely to continue to be popular in research into blended and online educational forms in the future. Although the technologies and combinations of forms that are likely to be used in these studies and practices are likely to continue to change, questions of student social and cognitive engagement in these instructional environments are sure to remain central.

In concluding, we as editors would like to thank the authors of the articles appearing in this special issue for all their work and their patience with the review and publication process. We would also like to express our gratitude to the peer reviewers for their invaluable but anonymous contributions (you know who you are!).

References

Garrison, R.D. (2011) *E-learning in the 21st Century: a framework for research and practice*. London: Routledge.

Garrison, R.D. & Vaughan, N. (2008) *Blended Learning in Higher Education: Framework, principles, and guidelines*. San Francisco: Jossey-Bass.

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