# Transdisciplinary research in technology enhanced/networked learning practices

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## Introduction

This symposium addresses the conference theme, theories and methodologies for research in networked learning, through exploring transdisciplinary research in the context of technology enhanced/networked learning (TEL/NL) practices across diverse geographical and disciplinary settings. For the purposes of this symposium, transdisciplinarity is distinguished from cross-, multi-, inter-, and post-disciplinarity via its combined recognition of sustained organising epistemological structures of disciplines, potential for disciplinary reorientation through dialogue, and focus on researching practices. Networked learning is distinguished from TEL by its constructionist underpinnings, its relational perspective on linkages among tutors, learners, and learning resources, and its "participative and democratic values" (Hodgson & Reynolds, 2005, p.11). The more generalist term, TEL, is defined by its accommodation of a broader range of ontological, epistemological, and pedagogical perspectives (Parchoma, 2011).

The three papers, listed below, report research involving a range of international disciplinary boundary crossings:

- 1 Parchoma, G., & Keefer, J. Contested disciplinarity in international doctoral supervision
- 2 Thomas, H. Stage on the page: Trying out the metaphor of Japanese Noh and Kabuki theatre as a way to explore text based activities in a virtual learning environment
- 3 Hunter, M., & Parchoma, G. Content and language integrated learning: Shifting boundaries and terrain mapping

The opening paper (Parchoma & Keefer) examines problematic representations of multi-, inter-, trans-, and post-disciplinary accounts of mode 2 knowledge creation (Becher & Trowler, 2001) and posits a framework for clarification and further discussion of the nature of disciplinarity in the context of TEL/NL support for international doctoral candidates across a variety of disciplines. The second (Thomas) and third (Hunter & Parchoma) papers illustrate cases of transdisciplinary research into networked learning practices in international creative writing (Thomas) and architectural (Hunter and Parchoma) higher education.

Parchoma and Keefer report the findings of a small-scale grounded-theory informed study of international distance doctoral supervision practices are reported. In the field of TEL/NL expanding technological support for part-time, distance, flexible access to doctoral programmes can bring together international groupings of supervisors and supervisees. Increasing enrolment and student diversity are sometimes leading to looser ties between supervisory expertise and supervisee thesis topics. Thus the mode of knowledge creation has been described as inherently multi- (Conole & Oliver, 2002), inter- (Parchoma, 2011), and trans-disciplinary (Becher & Trowler, 2001). In response to Conole and Oliver's (2000) call for a shared TEL/NL underpinning theoretical framework, we posit an in-progress conceptual framework for examining perspectives on disciplinarity and report supervisory challenges in supporting supervisees to overcome domain knowledge gaps and to develop methodological expertise. Early findings from this study suggest that efforts to develop a shared theoretical underpinning for the TEL/NL field face a series of challenges. However, the coming together of constituent technological, educational, and knowledge domains in TEL/NL research and practice necessitate collaborative efforts reciprocal interdependence among contributors. We argue that nature of the TEL/NL field may provide fertile transdisciplinary ground for represented disciplines to affect and potentially be reoriented by others.

Thomas employs concepts and approaches that are rooted in Sociology, Psychology and Literary Theory / Creative Writing to examine intersubjective interpretations of student-student and tutor-student relationships in a networked learning supported Creative Writing Masters programme. The focus of Thomas' paper is on relationships among students and between students and tutors in a networked learning Creative Writing Masters programme with a view to understanding the extent to which these relationships support students' learning goals. As creative writing Masters' programmes are often built on a pedagogy that emphasises peer interaction and critique, and as the process can involve exploration of sometimes intimate issues and require participants to

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allow themselves to be quite vulnerable in discussions about their writing, the focus of this study is on the way that participants and tutor relate when the process is mediated primarily through online text. In addition to analysing text within the learning environment, a series of interviews with students and tutors have been undertaken and analysed. Thomas' transdisciplinary blend of sociological (Goffman, 1969; Hutchby, 2001) and psychological (Stolorow. & Atwood, 1992) analyses of student-student and tutor-student communications engages a combination of Japanese Kabuki and Noh theatre traditions as metaphors.

Hunter and Parchoma report results of a desk-based study of content and language integrated learning (CLIL) in European Union architectural education where the potential for expansive learning theory (Engeström, 1987) to support the creation of a transdisciplinary community of researcher-practitioners focused on emergent CLIL practices in place-based and networked learning environments is explored. While CLIL offers a great deal of promise as a new approach to foreign language learning through the interweaving of content and language in a dual-focused educational approach (Marsh, 2008), it is at risk of becoming a 'buzz word' lacking evidencebased research to support its adoption. Where CLIL initiatives have been criticised for their potential displacement of language experts and potential erosion of content rigour, fostering an integrated networked learning community of language and subject experts could provide opportunities to co-construct reflective practice. We posit the argument that Engeström's (1987) third-generation activity theory, expansive learning (EL), offers a framework the development of an integrated transdisciplinary CLIL community. We also identify directions for future research to critically examine potential implications of the formation of such a community. By taking a case study approach and actively involving students of architecture in an emerging networked learning community, not only language learning may be enhanced but also professional development for in-situ practitioners of both language and non-language subjects through scaffolded transdisciplinary experimentation and inquiry. However, further studies could investigate whether or to what extent CLIL implementation via a transdisciplinary networked learning community might generate tension or conflict between architectural content and language learning.

#### Keywords

Interdisciplinarity, transdisciplinarity, multidisciplinarity,

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