Chapter 57

Cyclonic Transactions as Cultural Ecological Mechanisms for Investigating Change and Facilitating Action Research in Education

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ABSTRACT

The aim of this chapter is to draw together two theoretical perspectives on the dynamics of educational change and propose a contemporary integrated framework as an analytical tool for use in education. A cultural ecological framework, which views the individual as an integral part of the environment and places significance on interaction with the environment in the context of daily work, is integrated with a cyclonic transactional framework, which emerges from recent research on online education and traverses hermeneutical, transformational mechanisms. The cyclonic transactional framework forms a bridge between abstraction and lived experience, which are both at the heart of the cultural ecological framework, and provides a mechanism through which learning relationships may be explored. The augmented and integrated framework, developed from historical and current explorations, is a tool that can assist policy development, implementation, and evaluation for both classroom and online education.

INTRODUCTION

This chapter is concerned with mechanisms for investigating change and facilitating action research into educational systems, and the development of an associated framework and an analytical tool. It works from the premise that all environments are

adaptive through the interactions and transactions between the people and resources that inhabit them. The processes of adaptation are also processes of transformation in both the people and the environment. Our argument is that educational environments are traditionally investigated through their embedded structures and relationships, however,

to understand their adaptive and transformational potential requires contemporary consideration of the interplay between embedded structures and enacted, 'in the moment' behaviors. In order to address this matter we integrate two theoretical perspectives: (i) a cultural ecological framework (CEF), which views the individual as an integral part of the environment and places significance on interactions with the environment in the context of daily work (Dillon, 2008); and (ii) a cyclonic transactional framework (CTF), which emerges from recent research about online management education (Creed, 2009) and traverses hermeneutical, transformational mechanisms in the work of educators. Through this integrated framework we develop further the idea of emergence as a feature of educational situations. The framework has implications for policy formation and improved teaching for both classroom and online education especially by addressing the gap between understandings through abstraction versus enacted behaviours in a cultural ecological sense.

THE CULTURAL ECOLOGICAL FRAMEWORK (CEF)

Early foundations in the literature dealing with cultural ecology in the education field are informative (Naess, 1989; Waddock, 1991; Ryland 2000; Walck, 2003) and more recent contributions, some focusing on indigenous cultures, have highlighted the benefits and challenges of adapting education through the perspectives of complex, cultural layers and organic networks (Jolly, Whiteman, Atkinson, & Radu, 2011; Wilcock & Brierly, 2012). Within a cultural ecological framework, environments are seen as spaces shaped by the experiences, presences and practices of people through their everyday activities. The 'shaping' is an outcome of the interactions and transactions that take place within the environments. Interactions and transactions arise from peoples' perceptual and conceptual engagements with environments.

Perceptual engagement is 'lived experience'; it is co-constitutional in that the environment and the 'in the moment' behaviours of the individuals concerned mutually shape each other. In conceptual engagement, individuals draw on recalled experience and knowledge; their being and knowing is an abstraction of reality and is relational, that is, it relates to normative ways of being in the world and established bodies of knowledge (Bayliss & Dillon, 2010). The co-constitutional and the relational are constantly re-forming each other in ways that are themselves co-constitutional and relational.

As Marton (1993) observes, systematic understanding of the world is derived through cumulative organization and rearrangement of experientially acquired understandings of the world. However, the way we represent the world through our educational, organizational and managerial systems is substantially relational, that is, it emphasizes the structural outcomes, the cumulative abstractions of being in the world. These interrelationships are shown diagrammatically in Figure 1. The CEF has been refined through action research in a university setting where students were contextualizing their use of information and communication technology (ICT) (Vesisenaho & Dillon, 2013).

The matter that this chapter seeks to address is the interplay at the centre of the CEF between abstraction and lived experience. It does this by integrating a cyclonic transactional framework from another branch of educational research. The composite model constitutes a tool for analysis and reflection. However, before the utility of the tool can be explored it is necessary to explain the key regulatory processes in the CEF.

Regulatory Mechanisms

Organizational settings are adaptive environments that must on the one hand accommodate formalized, routine, objective-orientated, essentially relational activities (Creed, Zutshi, & Ross, 2009), and on the other hand enable people to experi-

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