

Chapter 10

The Role of Internet Technology in Higher Education: A Complex Responsive Systems Paradigm

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ABSTRACT

This chapter introduces the perspective of complex responsive systems for organizational and individual learning. It also discusses how these systems may profit from the use of Internet Technology. Using Herbert Mead's perspective on interactions and learning, the authors discuss the theory of complex responsive systems as learning systems. They also elaborate on the implications of this perspective for the use of Internet Technology as a driver for individual and organizational learning.

INTRODUCTION

For the past forty years, the topic of organizational learning has been well discussed (cf. Pawlowksy, 2000) and this discussion might be of importance to understanding how professionals including teachers and lecturers, develop, maintain and disseminate knowledge in organizations for higher education (cf. Simons, 1999). Cyert and March (1963) and Argyris and Schön (1978) can be ranked among the most important early thinkers on the concept of organizational learning; since the nineteen-nineties, organizational learning has become an increasingly important concept in individual learning and knowledge development (Senge, 1990). In individual learning, the role of the organizational context has been regarded as

increasingly relevant to formal ways of learning, for instance in education programmes, training courses and coaching outside the organization (Blomme, 2003; Revans, 1982; Wenger, 1998) but also to informal ways of learning which is important for knowledge sharing and dissemination (Simons, 1999; Blomme, 2003). The latter is especially important in organizations for higher education in which knowledge is an important resource for its primary processes and therefore should be developed, disseminated and maintained (Blomme, 2003).

Within the organizational context, individuals develop activities and practices in which they can ensure the transfer of existing knowledge and contribute to new knowledge by responding to and reflecting upon other organizational members

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(cf. Wenger, 1998). While many perspectives on organizational learning adopt a cognitive perspective defining the learning individual as a key factor in organizational learning, we introduce a different perspective and one that is not often used: an emergent perspective on organizational learning which emphasizes the responsiveness of the individuals as a condition for organizational learning (cf. Edmondson & Moingeon, 1998; Stacey, 2001; Blomme, 2003). Founded in chaos theory, the theory of complex responsive systems emphasizes the relationships between people and how the quality of relations and interactions may contribute to individual as well as organizational learning (cf. Stacey, 2001). This perspective on organizational learning is rooted in the work of George Herbert Mead who developed his ideas in the twenties of the last century and the work of Ralph Stacey and colleagues who used Mead's ideas for the development of a framework for learning, knowledge creation and change within organizations.

In this chapter, we shall develop the above-mentioned perspective on organizational learning. First, we shall discuss George Herbert Mead's work on interactions and how these can contribute to individual learning. Secondly, we shall consider the work on complex responsive systems published by Ralph Stacey and his colleagues and based on the work of Mead. The subsequent and remaining issue, seen from the perspective of complex responsive systems on organizational learning, concerns the question how Internet Technology can be used in attempts to support organizational learning. The application of Internet Technology in formal training and development situations has been studied extensively (cf. Salmon, 2005; Barczyk, Buckenmeyer & Feldman, 2010; Sangra, Vlachopoulos & Cabrera, 2012; Li, Lau & Dharmendran, 2008). Here, we shall discuss the potential learning contributions of Internet Technology as a distance learning tool for complex responsive systems.

The Social Act

Together with James Hayden Tufts and John Dewey, George Herbert Mead has become known as an important advocate of pragmatism, a philosophical school of thought arguing that something is true when it is confirmed in practice. In his seminal work *Mind, Self and Society*, Mead introduces the concepts of Self and Mind: Self refers to the elements of our personality that comprise self-awareness and self-image, and Mind refers to an individual's knowledge and cognitive skills (Mead, 1967). In his work, Mead states that Self can only evolve and develop through social interaction and experience; individuals can only grow and flourish if they interact with other individuals.

The development of various forms of meaning related to self-image and the environment (the rise of Self and Mind) takes place during the communicative process. In this process, Mead distinguishes two stages: 1) the exchange of expressions (gestures) and 2) the development of a common language, or as Mead puts it: the exchange of relevant expressions (significant gestures). The communication process is a subconscious one, and forms of meaning can only arise after the exchange of gestures and acts. A common language in which mutual expressions can be interpreted and new forms of meaning can be developed is born from the initial steps of exchanging gestures and acts, verbal as well as non-verbal. Meaningful communication entails the appropriate understanding by individuals of the meaning and significance of expressions. As this type of communication requires the presence of at least two people, Mead calls it a Social Act. The social act, or interaction, is the process during which forms of meaning evolve. The creation of meaning takes place in three steps: 1) an individual introduces an expression into the process, 2) the other party replies through a certain type of response, and 3) the initial expression acquires meaning. Thus, meaning and different forms of meaning are the result of this interaction process.

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