Chapter 13

Co–Construction of Learning Objects:
Management and Structure

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ABSTRACT

It is an unsettled issue between research traditions how we should negotiate the implied rather than acknowledged dispute between individual agency, i.e. the ability/need/urge of a manager to act on/in the world on the one hand and the functioning of a structured social system where management and employee initiatives, relations and reactions are crucial for the main activity. This chapter resolves parts of the debate by drawing on general activity theory and a digital tool for facilitating job-related group interaction.

INTRODUCTION

Kaptelinin & Nardi (2006, p. 235) suggest research should "theorize transformations between individual and collective levels." Regardless of methods, however, there seems to be creative dynamics at work between approaches. The reason is that there is transaction of situated and de-contextualized meanings going on. Furthermore, human interactions form (Wells, 2007, p. 165) an "occurrence of a joint activity in which multiple employees are collaboratively involved." And so, it is intriguing to learn how management, staff and employees deal

with recurring contradictions between agency and systems thinking.

Garrison (2001, p. 276) argues against Western thinking based on a list of dualisms in Dewey (1952/1989, p. 408): "The material and spiritual, the physical and the mental or psychological; body and mind; experience and reason; sense and intellect, appetitive desire and will; subjective and objective, individual and social; inner and outer;" In responding to the Deweyan philosophical approach, Roth (2007, p. 40) acknowledges the *dialectical* as opposed to *dualistic* relation between managerial agency and collective employment. Kaptelinin & Nardi (2006, p. 11) outlines agency versus structure for ICT environments, saying: "activity theory has

always had a strong notion of the individual, while at the same time understanding and emphasizing the importance of a socio-cultural matrix within which individuals develop." So, emphasis is on management, structure and a combination of the two deployed as a way of describing and explaining team learning in a digital setting.

Lev Vygotsky (1987) is a renowned proponent of a combined view on agency and systems thinking. He emphasizes the crucial impact of "structured situatedness" for development of human activity systems, suggesting that facilitating agency, today categorized as 'scaffolding' (Wood, Bruner & Ross, 1976) as a way of enhancing sought processes and outcomes of contextualized learning. Scaffolding is a pedagogic strategy which a facilitator employs to support the learner. Peter Senge (1990), a contemporary promoter of organizational theory, likewise outlines the significance of personal mastery in learning organizations, emphasizing the crucial impact of management to help employees think about the company and themselves in terms of relation building processes in a social system.

By agency we understand that individuals are ready, willing and able to act on impressions, take action, support activities and adapt to people and objects. A preparedness to act on personal needs, motives and goals so as to control other people's actions is a specific human ability, be it informed, planned or spontaneous. Furthermore the general idea for exercising agency, leadership or management is to produce an effect according to an original plan or to follow an adjusted intention. People seem to continuously contribute to the functioning of social systems where they listen to, calculate, process and respond to what is happening in physical, virtual and social worlds. Thus, any such system – a football team, an army, an orchestra or a staff meeting – is made up of people relating to each other with a shared understanding of the borders of the system, what the consequences would be if they crossed them, what keeps the community going and what separates the insiders from members of a neighboring system.

This article provides a conceptual account and empirical analysis of how strategic IT management and collective input to focus group sessions between managers and employees are classified differently, depending if the employees act from a self-managed and self-conscious level of awareness, attention and intention or from a high level of professional thinking. In contemporary organizational theory, researchers mistakenly (Hansson, 2002) try to explain the development of higher managerial functions like memorizing, rationalizing or decision-making as a result of agency executed through individual "push" obtained through the pursuit of personal needs, motives or goals. I advocate a theory that accounts for organizational development defined by the balancing effect of collective "pull" obtained through employees who deal properly with systemic factors like objective, instrument and contexts of production, distribution and consumption respectively. The deployed theory (Engeström, 1999) covers psychological subject-instrument-object relations and organizational objective-other people-rules and regulations-division of labor-relations. The combination encompasses individual and social influences on workplace learning. By deploying the suggested approach it is possible to improve on theory, for example by discovering and verifying the impact of individual agency in an ICT context where a digital tool mediates professional management and employee intentions.

PROBLEM DESCRIPTION

Nardi (1996, p. 69) introduced the problem of balancing agency with structure in a computing milieu by asking: "What are the relations between artifacts, individuals, and the social groups to which they belong?" Until now personal chemistry, compatibility of goals, interests or ambi-

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