Chapter II

Virtual Settings: E-Learning as Creating Context

Philip Duchastel, Information Design Atelier, Canada
Markus Molz, Diversity Dynamics Development Consultancy, Germany

Abstract

A fourfold model of the main contextual factors to be taken into account in learning is presented, with the view to examining how they interrelate and how they impinge on learning. We further consider the traditionally central factor of information (content) to help us see how it should be positioned within the more open context of e-learning. It is the advent of e-learning, and technology more generally, that is enabling a shift in the interaction, away from the delivery of information to access to information and away from interaction limited to the classroom setting to various virtual communities. The point of the shift is to reengage the learner in more personalized learning that can be more interesting and meaningful. It thus
overcomes the receptive learner stance encouraged by the impersonal delivery of information and encourages instead an active interactive stance in which the learner accesses information as per the current learning needs.

Introduction

“Context principle (C): Context is relevant for learning and the construction of meaning. Therefore, context must be taken into explicit consideration when planning instruction. Most designers accept some version of the Context Principle either explicitly or tacitly. . . . Differences involve what might be considered a relevant context” (Spector, 2000a, p. 523).

It is indeed a foundational claim of instructional design that context influences learning. After all, Gagné’s theory of learning and the design principles derived from it (see Driscoll, 2000) are explicitly based on a set of conditions of learning that represent internal and external factors impinging on learning. It is by tweaking these conditions of learning that one fashions a learning environment to optimize learning.

And yet, contextual factors generally play second fiddle in the fashioning of learning environments, giving pride of place to general instructional procedures and to content, that is, the knowledge that is to be learned. This reductionist tendency has been labeled “context stripping” (Richey & Tessmer, 1995).

This is certainly due to the impetus of positivistic science to look for general laws. But we should not forget that content factors are indeed important in their own right, as forcefully pointed out by Gagné in emphasizing the hierarchical nature of content mastery, whereby all prerequisites must first be mastered before attacking a more advanced skill.

Likewise, another leading theorist of the time, David Ausubel, also built a theory of learning around contextual factors that were knowledge based. He emphasized the importance of the learner having the knowledge context of what was to be learned for maximum benefit to be derived from the learning (Ausubel, 1963).

It is quite clear that factors related to how the learning content is structured and presented for learning favor or impede learning depending on how they are taken into account (Duchastel, 2003). This is what today has become the learning objects issue to be juggled with developing learning architectures (Ip & Morrison, 2001).

But what about the factors included in the educational setting? These are indeed given less attention in most circumstances. “What is more amazing than the wealth of educational resources that we have produced and accumulated is how far we have not come in improving learning and instruction” (Spector, 2000b). This harsh conclusion of an acknowledged expert in the field of instructional design and evaluation lets us ask the question how important the neglected