Chapter XII

Making Sense of Technologically Enhanced Learning in Context: A Research Agenda

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Abstract

This chapter proposes that technologically enhanced learning should be understood and evaluated by means of a combination of analytical strategies. These will allow us to analyze it both as seen from the macroanalytical or “outside” perspective of a rich social, cultural, and technological context, and from a microanalytical or “inside out” perspective of individual sense-making in learning situations. As a framework, we will be using sense-making methodology, and a model for causal layered analysis. Our area of attention will be limited to the “remediated classroom” of constructivist, net-based university education. Problematizing some common assumptions about technologically enhanced learning, the authors define 10 questions
that may serve as the basis for a research agenda meant to help us understand why the many visions and ideals of the online or remediated classroom are not more widely realized and demonstrated in educational design and practice.

**Introduction**

Internet veterans will remember BITNET. It was so named as an acronym for “Because It’s There Network” although it later came to stand for “Because It’s Time Network.” Both definitions reflect typical, and anything but optimal, reasons for introducing new technology, including those technologies meant to enhance teaching and learning. Today, a generation after it was first introduced, information and communication technology (ICT) is used widely and arguably successfully at all levels in the educational system. Yet, some doubts remain as to just how efficacious *technologically enhanced learning* really is. One such doubt about the match between ideals and reality was expressed in the call for chapters for this volume, and it is central to the argument in this chapter:

*But why then is it — with a general agreement on expectations of technology for enhancing learning — that these visions are not realized and demonstrated more widely in educational design and practice?* (Sorensen & Ó Murchú, 2004, Call for chapters)

We do not presume to be able to answer that question in detail. Instead, we will discuss how the visions and expectations that have come into being relate to the realities of the current educational scene. Our basic assumption is that expectations and visions may have been, and probably remain, too high and too bright, and we will outline a research agenda for studying some important, but easily overlooked factors that have an impact on the successful use of technologically enhanced learning. The outline of our research agenda integrates macroanalytical factors of importance with a microanalytical approach. In order to understand such a complex phenomenon as technologically enhanced learning, we propose using a combination of analytical strategies that will allow us to analyze it when seen from the “outside” together with a view allowing us to understand it from the “inside out.” Below, we shall therefore introduce a frame of reference based on *causal layered analysis* and *sense-making methodology*.

In this chapter, we intend to discuss only “the remediated classroom,” with its complex oral and written dialogical processes. Thus, we are not going to consider...
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