# Chapter IX Activity Theory and the Design of Pedagogic Planning Tools

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## ABSTRACT

This chapter uses activity theory to construct a framework for the design and deployment of pedagogic planning tools. It starts by noting the impact of digital technology on teachers' practice, particularly the role of planning in the creation of effective technology-mediated learning. It espouses the reconceptualization of planning as design for learning and identifies a key role for the emergent genre of pedagogic planning tools in stimulating practitioners' engagement in this reconceptualized practice. Drawing on activity theory, the chapter then characterizes the principal elements and relationships in design for learning. From the insights gained, it analyzes research data from two projects to pinpoint the enabling factors and tensions in current practice that might be conducive to (or, conversely, impede) the effective design and deployment of pedagogic planning tools. It then synthesizes these into a framework in which software developers and policy makers can explore their own contexts for implementing such tools.

## INTRODUCTION

It fundamentally made me think about what I actually do in the class. ... The VLE [virtual learning environment] really made me think about "how am I going to project what it is that I give to a lesson when I'm face to face on this screen?"... Usually I don't have to plan my lessons, I just go in and do it. ... What it brought me back to was the actual *lesson plan, you know, like when you first started off. ...it was like that all over again* (Masterman, 2006a, p. 31).

*E-learning is often talked about as a "trojan mouse", which teachers let into their practice without realizing that it will require them to re-think not just how they use particular hardware or software, but all of what they do* (Sharpe & Oliver, 2007a, p. 49).

These observations come from, respectively, a teacher who had recently encountered a virtual learning environment (VLE) for the first time and two researchers with considerable experience in staff development issues. Both express the now commonplace truth that, for many teachers, introducing digital technology into their pedagogy can have ramifications for the whole of their practice—even forcing them to replan from scratch classes which they have taught successfully for years. Many teachers embrace this disruption willingly and with enthusiasm; others, however, remain reluctant to engage with technology, even in institutions where its use is already embedded in the overall teaching and learning strategy.

The reasons for this reticence may lie with the individual practitioners themselves. Data from recent research by Masterman and Manton (2007) point to factors that include a lack of awareness or curiosity regarding the possibilities afforded by technology, "technophobia," lack of time to explore technology, aversion to the risks inherent in experimentation, and-even today-a fear of being supplanted by the computer. Alternatively, the problem may lie in the workplace: for example, other teachers may be using technology to enhance their students' experience, but there are no mechanisms for spreading the message or sharing learning designs. Nevertheless, these individuals find themselves under pressure to adopt technology in their teaching, whether from above (e.g., through making technology use a criterion in performance assessment) or from below, as more and more students arrive at college or university already expert in the use of digital technologies and expecting their tutors to be likewise.

To address this state of affairs, institutions within UK post-compulsory education have begun to assume responsibility at the corporate level for promoting the uptake of technology-mediated learning(e-learning) among teaching staff(Oliver, 2004; Sharpe, Benfield, & Francis, 2006). The concern of this chapter is to drill down directly to the bottom of such institutional initiatives and examine how the uptake can be optimally supported: that is, how to bring institutional change to the individual university or college tutor in such a way that the encounter with novel concepts, forms, practices, and tools will be productive at both levels. This entails studying the individual's practice within the institutional system, keeping the interests of both in balance.

This chapter focuses on planning as the locus of this encounter: that is, where individual practitioners start to get to grips with technology and explore its implications both for their pedagogical (i.e. theoretical) approach and the practicalities of their teaching. More specifically, it is concerned with the mediation of this activity by the emergent genre of pedagogic planning tools (e.g., Earp & Pozzi, 2006; Masterman & Manton, 2007; Walker, Laurillard, Boyle, Bradley, Neumann, & Pearce, 2007). These tools are purpose-built to guide teachers through the construction of plans for learning sessions that make appropriate, and effective, use of technology.

The principal objective of this chapter is to propose a framework for analyzing the planning process in order to uncover the affordances and constraints within current practice that may be conducive to or, conversely, impede the effective design and deployment of pedagogic planning tools and their acceptance by practitioners. This framework is derived primarily from two projects funded by the Joint Information Systems Committee (JISC) and conducted at the University of Oxford between 2005 and 2007. Its ultimate aim is twofold: (a) to provide a means for developers of such tools to contextualize the requirements for their functions and features, and (b) to enable policy makers to explore their own settings and arrive at their own recommendations regarding the deployment of pedagogic planning tools and the policies and processes to support them. In pursuing this aim, the chapter adopts two key positions. The first is a variant perspective on learning design called *design for learning*. The second is the use of activity theory to underpin the analysis of the empirical work.

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