Chapter XIII

Learning to Use IT in the Workplace:
Mechanisms and Masters

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Abstract

Fluency with information technology (IT), defined as "an ability [to use information technology] to express [oneself] creatively, to reformulate knowledge and to synthesize new information" (Committee on Information Technology Literacy, 1999, p. ES1) is an important concern for those who manage workers with jobs that require the use of IT. Training is one mechanism to build fluency, but research about "influential individuals" hints that other mechanisms might also play a role. This article presents an interpretive case study of junior-level knowledge workers at a management consulting firm. To learn to use the IT of their jobs, these workers relied not only on formal training, but also on on-the-job learning through experimentation; reading books, manuals and online help; and social interaction with their peers. The researcher identified different types of "master users" who were indispensable for this learning to take place. The findings of this study suggest that managers and researchers interested in

training users also devote attention to these other mechanisms for learning, especially the "master user" phenomenon.

"Fluency with information technology... entails a process of lifelong learning in which individuals continually apply what they know to adapt to change and acquire more knowledge to be more effective at applying information technology to their work and personal lives."

(Committee on Information Technology Literacy, 1999, pp. ES1-2)

Fluency in the Workplace

With the preponderance of information technology in our society and the growing importance of the Digital Divide (Anonymous, 2000), *fluency with IT*, defined as "an ability [to use information technology] to express [oneself] creatively, to reformulate knowledge and to synthesize new information," has become an important concern for our society (Committee on Information Technology Literacy, 1999, p. ES-1). In particular, "[m]any (people) who currently use information technology have only a limited understanding of the tools they use and a (probably correct) belief that they are underutilizing (sic) them" (ibid., p. ES-1). Thus, research directed at how people use information technology (IT) in their work and the process by which they learn to use it is valuable for those who manage workers with jobs that require the use of IT.

The present research examines the use of IT by knowledge workers at one organization to understand how they become fluent with the information technologies of their work. In particular, the purpose of this research, a qualitative case study, is to determine the mechanisms these workers — management consultants at a global, strategic management consulting firm — employ to use fluently the information technologies of their work. These management consultants, recent graduates from elite educational institutions, work in project teams to assist clients, Fortune 500 or Fortune 1000 companies, in determining the strategic direction of their firms.

In comparison with many studies about learning to use IT, this study examines mechanisms for learning that surpass formal, structured training. In particular, this study investigates on-going learning of the information technologies workers have at their disposal, rather than the formal training devoted to use of a particular system. Additionally, this study uses intensive research methods to understand users in their natural work settings. By using intensive methods, the researcher was able to pursue a line of enquiry that has been disregarded in the

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