Chapter XXII
Virtual Workplaces for Learning in Singapore

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ABSTRACT

The concept of the virtual workplace is used in three initiatives to create an out-of-classroom environment where learners worked on virtual space while engaging in learning activities. The first involves a multi-group field-class working at geographically separated locations, under on-demand supervision from the lecturer on virtual workplace, using Internet, video and text messaging, on-demand file uploads and file transfers. The second involves use of virtual lab, to prepare for complicated laboratory procedures and reduce classroom time by allowing virtual hands-on lab exposure. The third initiative is supported by online learning resources, providing a learning environment on demand, on virtual workplace and hence with the associated freedom of choice. Learner responses to each of these initiatives are discussed.

INTRODUCTION

The virtual workplace, as an alternative working environment has been an issue mostly affecting the employment scenario. Advances in information technology, and people's familiarity of cyberspace almost make it mandatory to look at this very innovative working arena beyond what is deemed as a commercially viable approach. Being virtual in several places and yet not having to be physically there is by itself an extremely useful concept that may unshackle many of the burdens of another very important area of societal development—in the realm of teaching and learning. Many a time

educators lament of having too little time to teach too many things, of having too little time to give customised attention to learner groups. Use of virtual learning place is set to reduce many of these commonly-faced maladies of the teaching environment.

This chapter defines the term 'Virtual Learning Place' as a space or a platform over which learning can be situated without the learners and the facilitator being present face-to-face. From the perspectives defined and delineated in the chapter virtual workplace entails a learning environment where learners and facilitators are situated in physically distant locations but in

synchronous remote contact and involved in real-time communication, using technology-supported communication tools. This enables the parties involved to be freed from the confines of face-to-face contacts and yet enables everyone involved to be in contact at all times and on demand. It is argued that this strategy not only optimizes the learning time and space but also encourages learner-centred learning and learner control. Thus technology-assisted virtual workplace can expand the frontiers of teaching and learning, and not just benefit the commercial work environment.

This chapter looks at the background of virtual workplace and goes on to discuss the issues addressed in three learning scenarios, using the concept of virtual workplace to recreate a classroom learning situation with teacher supervision, a simulated lab facility and a virtual teacher-supervised field work session. Finally, learner responses are analysed to examine the effectiveness of these initiatives in providing a more enriched and more useful learning environment.

BACKGROUND

The importance and pervasiveness of the virtual workplace has increased significantly in the work environment. Today's employment market has changed greatly, and many jobs are no longer as rigidly structured in terms of working hours or workplaces as they once were a few years back. Businesses are introducing flexible working arrangements because of the commercial benefits they can bring. This reflects the changing needs of both customers and employees (Department of Trade and Industry, UK, 2006).

Jeremy Zawodny's comments regarding the current work environment, "If someone actually asked me 'how many hours a week do you work?', I'd have no idea how to answer. Living and working this way just seems natural" (Zawodny, 2006), is pervasive in not just one country but everywhere that is touched by Internet connectivity and the

concept of a physical boundary of a country or organization or even time seems to disappear with this technologically-connected environment. Quite rightly the comments of Zawodny's visitors, "That's not work—you're just using instant messenger" points to the changing work norms of today's world.

Froggatt (2001) talks about the concept of virtual workplace, which is aimed at professionals working in an organization and trying out new and innovative methods of cooperating with colleagues, customers, and partners using the Internet platform. A secure and shared Internet workplace, sharing documents, discussions, Web links, and even advanced features for booking and having multi-point video conferences are the usual set up requirements for such virtual workplaces. A shared workspace radically improves the efficiency of communication and coordination of work in a project involving several different organizations and has, therefore, been seen as a viable work environment in many forward-looking fields of employment. The virtual workplace, it is argued, gives us the opportunity to liberate ourselves from the traditional constraints of time, space, and infrastructure.

Among the principles put forward by Froggatt (2001) are some very important issues that play a central role in the establishment of a virtual workplace:

- **Initiative:** having the courage to innovate and change
- **Individuality:** helping individuals to discover the work style that suits them best
- **Connectivity:** reducing reliance on face-to-face interaction and using the new technologies to develop a wider sense of community
- **Workplace Options:** shedding the requirement of commuting to the corporate office, increasing choice of workplace and redesigning common work spaces

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