

## Chapter 4.12

# Combining Synchronous and Asynchronous Distance Learning for Adult Training in Military Environments

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### **ABSTRACT**

A major issue problem in military training is the territorial dispersion of military personnel in a wide geographical area. Typically in every military training course, officers are gathered in training camps and attend the lessons. The specific model obliges officers to leave their position, their units to lose their services, and is extremely costly, as the learners have to move and reside near the training camp during their training. The application of distance learning techniques seems in a position to solve such problems. The School of Research and Informatics for Officers of the Greek Army in cooperation with the academic community in Greece studied the possibility of

training military personnel via a computer assisted distance-learning system and then implemented a pilot program in operational business management. This chapter describes the results of this study, the experience acquired during the implementation, and an overall assessment of the pilot program.

### **INTRODUCTION**

The increasing degree of technology shift and the growth of available information for consumption transform education into an incessant process. Furthermore, managerial needs impose the continuous strengthening of the capacities of human resources, since the human capital provides the

impetus of any organization. As a result, the utmost priority of any modern army is the constant training and education of the military personnel in a wide gamut of issues.

Current telecommunications and information technologies provide the indispensable capabilities for lifelong education without the need for presence at a physical classroom; this is defined as “distance learning” (Moore & Kearsley, 1996). In essence, this is a form of open education, in which the teacher and the learner need not be in the same space, since they are in touch by means of synchronous or asynchronous communication. In general, distance learning comes in many forms: some try to simulate the classroom paradigm’s two-way, synchronous communication in real time, while others support independent study controlled by the learner. The latter scheme is supported by most current distance learning environments (Broady, 1996).

One of the goals of open distance learning is to provide access to all levels of education to individuals that distance or personal circumstances make it very difficult for them to attend conventional classes. Another goal is to teach courses to remote locations or military camps that are difficult for teachers to access. Consequently, the military environment is one of the best suited for distance learning, since learners are geographically dispersed and absence from their positions usually causes additional problems in the operation of their units (Maglogiannis, Mpourletides, & Karpouzis, 2003). Several studies have proven the efficiency of distance learning in vocational training of the personnel in big public organizations (Folkman, 2002; Gemeinhardt, 2002; Sampson, Karagiannidis, Schenone, & Cardinali, 2002). This chapter sums up the results of a pilot distance learning course, taught to military personnel.

Fundamentally, distance learning is education delivered over a distance to one or more individuals located in one or more venues. Distance learning includes two modes of operation: “synchronous

distance learning,” which occurs when teacher and student are present at the same time during the instruction, even if they are in two different places, and “asynchronous communication,” which occurs when students and teachers do not have person-to-person simultaneous interaction during teaching. Asynchronous distance learning is delivered through open networks such as the World Wide Web, private intranets, or home computer-based study applications, while student faculty communication occurs via e-mail, including comments on homework assignments.

## **ACADEMIC ISSUES**

### **Models of Learning Environments**

A distance learning training program may be directed to learners of different degrees of educational level, minors or adults. In the case of learners in military service, the special circumstances of their profession impose special requirements, as well as special demands, on a distance learning environment. As a result, it is extremely necessary to pinpoint their individual needs, so as to prepare measures for satisfying them to the greatest extent. According to Knowles (1990), some of the most important “counter-measures” are:

- Introduction of cooperative learning climate
- Establishment of mechanisms for teachers’ and learners’ mutual planning
- Identification of learner needs and interests
- Identification of learning objectives based on the diagnosed needs and interests
- Preparation of sequential activities for achieving the objectives
- Execution of planning via careful choice of methods, educational material, and required resources

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