Chapter X

Applying Instructional Design Principles and Adult Learning Theory in the Development of Training for Business and Industry

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INTRODUCTION

Learning and instruction exist beyond secondary and post-secondary education. In business and industry, corporate universities and learning institutes are replacing the traditional human resource-based training departments. Learning communities such as Motorola University or SAS Institute Boot Camp are being studied and replicated throughout the world as the importance of knowledge as a resource and knowledge management as a strategic goal become indicators of a system’s economic health (Newman & Smith, 1999). e-Learning, CBT, and WBT can also replace costly training systems and provide a wider dissemination of consistent and up-to-date knowledge and skills throughout an organization without huge impacts on the bottom line (Hyland, 2000).

But the old ideas of training for efficiency or productivity and old paradigms of learning as something that takes place in “schools” have to be retooled to meet these new needs. Training does not just consist of psychomotor skills. Most jobs today have huge knowledge bases that continue to grow and, for the newer jobs, cognitive skills have surpassed perceptual and physical skills in importance. Training approaches in today’s corporate world need to have more performance orientation as opposed to the learner perspective being taught in public schools and universities. Learning and regurgitating facts, skills, and content is not enough.

The idea of training for performance is as old as the apprenticeship systems used by craft guilds in the Middle Ages. Then a person learned a trade or craft by working under the guidance of an experienced workman or master craftsman (Cooper, 1978). The apprenticeship system of on-the-job learning was prevalent up until the Industrial Revolution when schools replaced it as the source for acquiring job-related skills. Pre-job training in special vocational schools augmented any skills that were not learned in the normal public school. World War II challenged this system and brought about formal training programs conducted in the work environment, i.e., on-the-job training (Scales & Yang, 1993). Skills were parsed. Knowledge was specific and individualized to the company’s needs. Sub-optimization was frowned upon. The system must be optimized.

On-the-job training is still a necessity, but the rapid changes taking place in the work environment call for both formal and informal workplace training. The information needs of even low-skill jobs such as fast food cashiers cry for the design of better machine-human interfaces, embedded training, and performance support programs in the form of help screens or task wizards that pop up with advice even before the worker calls for assistance.

Because instructional design uses a system approach to developing training, it is being used more and more by business and industry to improve their competitive edge. Business first saw the value of the system approach to training when it began working more and more with large-scale military projects and, more recently, with the space program.

Objectives for This Chapter

The purpose of this chapter of the section is to demonstrate how corporations can deliver efficient and effective learning to their in-house designed courses and demonstrate that they add value to the corporation. Using instructional design principles can shorten training cycles, improve retention, and empower learners. It can also provide companies with the
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