Chapter IX

Development of Online Distributed Training: Practical Considerations and Lesson Learned

Eileen B. Entin, Aptima Inc., USA

Jason Sidman, Aptima, Inc., USA

Lisa Neal, eLearn Magazine, USA

Abstract

This chapter discusses considerations and tradeoffs in designing and developing an online teamwork skills training program for geographically distributed instructors and students. The training program is grounded in principles of scenario-based learning, in which operationally realistic scenarios are used to engage students in actively forming links between classroom and real-world applications of key concepts. The chapter focuses on supporting active engagement of learners, and meaningful and thought-
ful learner-learner interactions appropriate to the subject matter (Neal & Miller, 2006). We describe lessons learned in the development of a distributed training program that interleaves asynchronous and synchronous training modules (Neal & Miller, 2005) to leverage the advantages of both self-paced and group learning, provide opportunities to practice the teamwork concepts being trained, create social presence, and promote interaction and reflection among the course members.

Introduction

The value of peer learning is well known, especially for domains in which people will apply what they learn in collaborative settings, but it is challenging to design courses that effectively incorporate and support peer learning. When learners are copresent in the classroom, it is easier to devise exercises that facilitate peer learning. Currently, most training outside of the classroom is self-paced, eliminating peer and instructor contact, due to the perceived cost reduction and the greater ease of implementation. It is a challenge to develop online training that incorporates these rich human interactions while respecting the time constraints under which learners operate, yet it can lead to deeper learning that is more memorable and more easily applicable (Neal & Miller, 2005; Notess & Neal, 2006).

This chapter discusses considerations and tradeoffs in designing, developing, and evaluating an online training program for an instructor and students who are geographically distributed. The discussion will take readers through the development process, starting with analysis of audience and goals, to the challenges in acquiring and adapting course material to the online format, and finally the implementation and evaluation. We focus on considerations involved in supporting active engagement of learners, and meaningful and thoughtful learner-learner interactions appropriate to the subject matter (Neal & Miller, 2006).

Training is successful only when there is a demonstrable performance improvement; for that to occur requires opportunities for demonstration, practice, and feedback, as well as for declarative learning (Cannon-Bowers, Tannenbaum, Salas, & Volpe, 1995). Furthermore, training that involves teams, rather than individuals, requires that the practice and feedback is conducted in a team environment. Whereas in the past training has been traditionally delivered.