



## **Chapter IX**

# **Developing a Learning Environment: Applying Technology and TQM to Distance Learning**

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## **INTRODUCTION**

It is known that good classroom management techniques help promote a suitable learning environment, an environment in which students are interested and participate as a community of learners (Brophy & Alleman, 1998). In this type of environment, learning occurs when faculty develop and encourage discussion through the use of social interaction (Brophy & Alleman, 1998). The problem in applying these concepts to a distance education program is “how to develop or maintain an environment of social interaction?”

To contribute to the learning environment in a distance education program, a combination of new and readily available electronic communication technologies can be combined with concepts taken from Total Quality Management (TQM). The term “distance education” covers a wide range of educational practices, ranging from the traditional correspondence course to synchronous teleconferencing via multiple classrooms. The techniques discussed here are designed primarily for a distance environment that allows for some degree of student-faculty interaction.

Regardless of the learning methods used, a distance education program is dependent upon student commitment and the TQM

approach gives students a high degree of ownership of the learning process. Likewise, electronic communication technology allows faculty to assess student progress and provide feedback in a timely fashion – regardless of the geographic distance between the student and the faculty member.

### **Changes in Academia**

Academia in America has felt profound change while progressing from the 20<sup>th</sup> to the 21<sup>st</sup> centuries. Society no longer accepts the “ivory tower” premise and is beginning to value teaching efforts as much as research. In summary, social pressures are demanding university accountability for student learning (Hill, 1997). These pressures reach state-funded campuses in the form of financial incentives (or disincentives) from state legislators, who seek quantifiable results of educational contributions to society. Reacting to these pressures, institutions of higher education have pushed faculty to focus efforts on enhancing the student’s learning process (Hill, 1997).

### **The Growth of Distance Education**

As an outgrowth of the increased focus on quantifiable contributions to society, higher education has attempted to “reach out” to an increasingly larger population of potential students. Many schools are attempting to reach these students through what is hoped to be a cost-effective method of distance education (Noon, 1996). As a result, a 1999 study indicated that 58% of two-year and 62% of four-year public colleges offer courses through the Internet (Hodgson, 1999).

The concept of distance education and distance learning has gone through many changes over the past few decades inspired mostly by advancements in technology. Once relegated to the level of a “correspondence course,” electronic communications technology now allows a distance learning course to function much more like a traditional course, including “real-time” lectures and discussions.

The downside to advances in electronic technology is that developments have progressed faster than faculty can learn to apply the new technologies. This growth of electronic and communications technology has forced many faculty to question how to apply this technology to student education (Black, 1997). Faculty are now expected to be masters of technology and delivery management as well as experts in their subject (Laird, 1999). In order to make distance

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