Chapter 13
Finding Determinants Affecting Distance Education Effectiveness in Terms of Learner Satisfaction and Application Achievement

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ABSTRACT
Distance education has become an important method of extending education to populations that otherwise might be educationally neglected. Distance education in the private sector provides learners with more educational opportunities and widens the range of innovative services with a one-stop educational solution. With distance education, learners can undertake customized education on a more ubiquitous scale. Additionally, information technology allows both trainers and learners to work independently, free from the constraints of location. This study selected the determinants of educational effectiveness from previous literature regarding traditional educational environments, and empirically tested the authors' hypotheses to examine factors that affected educational effectiveness in terms of learner satisfaction and application performance using a structural equation model. Results show that factors in traditional education are still significant in terms of application performance while certain factors in distance education affect learner satisfaction. The authors expect that this research can serve as a guideline for distance education in the private sector.

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INTRODUCTION

Private companies are increasingly making an effort to accommodate a changing work environment and to enhance their competitiveness. With the advent of the Internet and the development of information technology (IT), many companies have replaced traditional methods of instruction with distance education in an attempt to manage human resources more efficiently. The expectation is that distance education will provide more education-related opportunities and enhance the organization’s learning effectiveness. A large portion of education consists of memorizing facts and understanding concepts. While self-study is also possible, education is generally taught in school settings or other education centers. Training typically consists of gaining skills and is taught either in trade schools or in business training sessions (Ng & Feldman, 2009). In this article, employees learn new concepts as well as how to apply them more specifically and efficiently to their tasks; therefore, this study employs the term education rather than training.

Distance education has proven itself to have many advantages over traditional education, some of them being convenience, flexibility, cost-effectiveness, and elimination of geographical barriers (Ahmad, Piccoli, & Ives, 1998). In addition, it optimizes students’ achievement (Maki, Maki, Patterson, & Whittaker, 2000; Schutte, 1997), their attitudes toward learning, and their learning experience (Alavi, 1994). Therefore, this research may predict that distance education will enable companies to achieve greater cost savings and build a highly efficient educational environment that maximizes the performance of employees (Walsh & Reese, 1995).

With that in mind, this study attempts to identify the determinants of distance education performance in terms of learner satisfaction and application performance. The determinants were selected from previous research under a traditional educational environment as well as from recent IT developments relevant to distance education.

This paper is organized as follows: first, it reviews previous literature located online and traditional education in development of determinants, hypotheses, and research models. Second, it explains the procedure by which the data was collected and analyzes the results of the test of the hypotheses. Finally, this study will discuss the implications and limitations of the results, and follow up by indicating the future direction of the research.

LITERATURE REVIEW

Distance education, which is often used interchangeably with virtual learning, web-based learning, electronic learning or online learning (Sharma, Kitchens, Booker, & Xu, 2006; Lu, Yu, & Liu, 2003; Ubell, 2000), enables companies to provide more learning opportunities to learners and enhance the quality of learning through a computer-based telecommunication network (Peltier, Schibrowsky, & Drago, 2007). Thanks to the latest technologies, distance education enables sophisticated interactive communication (Hirschheim, 2005). That is, distance education provides not only typical one-way classes where information flows from trainer to learner, but also a suitable environment for the interactions between trainers and learners as well as among learners themselves (Morrison, Sweeney, & Heffeman, 2003; Riitta & Alvesalo, 2003). Virtual learning also enables both synchronous interactions such as those experienced in traditional face-to-face education, and asynchronous interactions beyond time and space (Clouse & Evans, 2003). The use of computer chatting, video conference and voice communications is popular in synchronous interactions, while e-mail and bulletin boards are popular in asynchronous methods.

E-learning has many advantages when compared to traditional education as it encourages