



## **Chapter XI**

# **The Emergence of Distance Learning in Higher Education: A Revised Group Decision Support System Typology with Empirical Results**

Caroline Howard  
Emory University

Richard Discenza  
University of Colorado, Colorado Springs

Although distance learning is not a new phenomenon, recently there has been a huge jump in the number of organizations offering on-line instruction. The National Center for Education Statistics released a two-year survey on distance programs for higher education on behalf of the U.S. Department of Education. The survey reported that one-third of U.S. post secondary schools offered distance education in 1995, and an additional 25% planned to offer courses within the next three years.

Probably the best methodological critique of the emerging literature on the impact of distance learning was contained in the 1996 special issue of *The American Journal of Distance Education*. The issue's intent was to disseminate information and act as a forum for criticism and debate about the practice and research of distance education in the Western world. The lead article entitled, "The Evolution of Distance Education: Emerging Technologies and Distributed Learning," by Chris Dede was followed by well-documented critiques of the dis-

tance education literature (Dede, 1996). The issue brought attention to the unique and complicated needs which exist among different kinds of learners. What works for one individual may not work for another. Researchers and practitioners have acknowledged the different needs of students in traditional classrooms for years, and it appears that the needs of distance learners also vary.

A recently released report on distance learning on the material published since 1990 points out that several hundred articles, papers and dissertations have appeared in the form of original research, how-to articles and policy papers. There are at least six journals that stress college-level distance education as their central theme. However, most of what has been written about distance learning consists of opinion pieces, secondhand reports and how-to articles that do not include original research on students and faculty. With few exceptions, the bulk of the writing lacks a theoretical or conceptual framework (Phipps & Merisotis, 1999). Frameworks and typologies provide a basis for researchers to build on the work of others and allow researchers to replicate and strengthen its generality; thus making individual studies more meaningful.

Distance learning programs use a wide variety of types of communication, modes of interaction and electronic media. Given the assortment of distance education programs, it is difficult to research the uses and impacts of the various forms of distance education so that they can be used properly and assessed in terms of the impact of distance education on student learning (Money, 1996). This chapter proposes a typology for categorizing distance learning and reports on the results of a study of 119 MIS programs who responded to an e-mail survey sent to the professors listed in the *Directory of MIS Faculty* (DeGross 1995).

## BACKGROUND

Recent distance education programs incorporate similar dimensions to Group Decision Support Systems (GDSS) in terms of the technology used, communication transmission and types of interaction. GDSS is a broad-based term that is used to describe a variety of computer-based tools used to increase the effectiveness of group decision making. Some major categories include electronic meeting systems (EMS) and computer-based systems for cooperative work (CSCW).

12 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: [www.igi-global.com/chapter/emergence-distance-learning-higher-education/8586](http://www.igi-global.com/chapter/emergence-distance-learning-higher-education/8586)

## Related Content

---

### Exposing Mental Models to Accelerate Distance Learning Environments

Mario Andrade (2022). *Designing Effective Distance and Blended Learning Environments in K-12* (pp. 73-88).

[www.irma-international.org/chapter/exposing-mental-models-to-accelerate-distance-learning-environments/292175](http://www.irma-international.org/chapter/exposing-mental-models-to-accelerate-distance-learning-environments/292175)

### Copyright with an International Perspective for Academics

Stephen Marshall (2005). *Encyclopedia of Distance Learning* (pp. 440-454).

[www.irma-international.org/chapter/copyright-international-perspective-academics/12143](http://www.irma-international.org/chapter/copyright-international-perspective-academics/12143)

### Using the Social Web Environment for Software Engineering Education

Pankaj Kamthan (2011). *Online Courses and ICT in Education: Emerging Practices and Applications* (pp. 23-45).

[www.irma-international.org/chapter/using-social-web-environment-software/50172](http://www.irma-international.org/chapter/using-social-web-environment-software/50172)

### Exploring the Inescapable Suffering Among Postgraduate Researchers: Information Overload Perceptions and Implications for Future Research

Nabil Hasan Al-Kumaim, Siti Hasnah Hassan, Muhammad Salman Shabbir, Abdulwahab Ali Almazroi and Hussein Mohammed Abu Al-Rejal (2021). *International Journal of Information and Communication Technology Education* (pp. 19-41).

[www.irma-international.org/article/exploring-the-inescapable-suffering-among-postgraduate-researchers/267722](http://www.irma-international.org/article/exploring-the-inescapable-suffering-among-postgraduate-researchers/267722)

### Design Learning environment based on ISTE standards.

(2021). *International Journal of Information and Communication Technology Education* (pp. 0-0).

[www.irma-international.org/article//272243](http://www.irma-international.org/article//272243)