Researching Distance Education and E-Learning

Som Naidu
The University of Melbourne, Australia

AN OVERVIEW OF RESEARCH IN DISTANCE EDUCATION

An overview of the distance learning (DE) literature from the past few decades shows a great deal of attention being focused on "descriptive" research, which was work that aimed to describe the DE phenomenon. This focus led to some interesting and groundbreaking work on defining the nature of distance education, and theorizing about learning and teaching at a distance (see Keegan, 1996). With more experience, both in the practice of DE and its study, there has been growing interest on evaluating the quality of learning and teaching at a distance, and on the influences of various forms of technology in this regard. This research has drawn from what we know about human cognition, learning, and teaching, and about the effects of educational technology, including how to go about ascertaining their effects validly and reliably. One of the most noteworthy contributions to educational practice of distance education has been the awareness and interest in learning and instructional design processes, and course design and development more generally. Mostly because of the need to pay greater attention to distance learners, educators have come to realize that "shoveling" lecture notes and class schedules (known as "shovel ware") into printed study guides and online learning environments is not going to be enough. A lot more is necessary to engage learners and support them in their learning.

Despite these positive developments in the direction that DE research is currently taking, it would not be erroneous to suggest that research and scholarship in this broad field of distance education and e-learning is still very weak from several perspectives. Part of the reason for this lies in the multidisciplinary nature of the field, which restricts the emergence of one or more clearly defined and widely accepted research methodologies. Researchers in this field tend to adopt methods from areas such as education, humanities, or the social sciences, although they are sometimes applied less rigorously than in those disciplines (Berge & Mrozowski, 2001; Bernard & Naidu, 1990; Bernard, Abrami, Lou & Borokhovski, 2004). Studies prepared by the United States Institute for Higher Education Policy have furthermore observed some serious limitations with existing research practices in DE (see Phipps & Merisotis, 1999).

The report by Phipps and Merisotis (1999) is based upon material that was published during the 1990s. It places particular attention on those types of technologies that are currently being used by the majority of institutions. This report concentrates primarily on an evaluation of all original work—including experimental, descriptive, correlation, and case study research. It also summarizes key information and findings of other policy papers, articles, and essays that dominated the literature. The authors of this article concede that while this review of original research does not encompass every study published since 1990, it does capture the most important and salient of these works. From this sample of original research, we found that the three broad measures of the effectiveness of distance education usually examined are: *student outcomes such as grades and test scores, student attitudes towards learning through distance education,* and *student satisfaction toward distance learning.*

Phipps and Merisotis claim that most of the studies they examined conclude that, regardless of the technology used, distance learning courses enjoyed high student satisfaction rates and compared favorably with classroom-based courses. For example, many experimental studies they examined indicate that students participating in distance learning courses performed as well as their counterparts in a traditional classroom setting. These studies found that their distance learning students had similar grades or test scores, or had the same sorts of attitudes toward their course. The descriptive analy-

ses and case studies focus on student and faculty attitudes and perceptions of distance learning. The purposes of many of these types of research were to develop recommendations to improve distance learning. These studies typically concluded that students and faculty had a positive view towards distance learning.

PROBLEMS WITH RESEARCH IN DISTANCE EDUCATION

The Phipps and Merisotis report claims that a closer look at this research, however, reveals that it may not be prudent to accept these findings at face value because of problems with the methods that were used to reach these findings. It claims that the most significant problem had to do with the overall quality of the research, which pretty much rendered many of the findings inconclusive. Phipps and Merisotis claimed that the findings of the original research must be read with some caution. Similar sorts of remarks about distance education research have been articulated by Anglin and Morrison (2000), Diaz (2000), Perraton (2000), and Saba (2000). Evaluating the quality of any research requires determining if the studies adhered to commonly accepted principles of good research practice. This is essential if the results of the studies are to be considered valid and generalizable. If a study does not abide by these proven principles and practices, the results they derive can be erroneous and misleading. The Phipps and Merisotis report flags the following issues as the shortcomings of the surveyed literature:

- Many of the experimental studies did not use randomly selected subjects.
- Much of the experimental research reviewed did not control for extraneous variables and therefore could not show cause and effect.
- The validity and reliability of the instruments used to measure student outcomes and attitudes were questionable.
- Many of the studies did not adequately control for the feelings and attitudes of the students and faculty.

These are critical concerns and they need serious consideration by researchers in the field, as these issues remain prevalent in much of contemporary distance education research. A large part of the problem with the poor research effort in distance education is due to the ineffective *match of research question or topic* with *suitable research methods*.

TOWARDS A FRAMEWORK FOR RESEARCH

The remainder of this article discusses a framework for effectively matching *research methods* with *areas and topics of investigation* in distance education and e-learning (see Table 1). The strength of this framework is that it has the potential to ensure the most appropriate research method is selected for the question or topic that is to be investigated. The framework itself does not provide direction on how a piece of research ought to be conducted. Instead, it serves as a planning tool for matching *research method* with the *research question or topic*. The two critical attributes of this framework are: a) topics or areas of investigation in distance education and e-learning, and b) methods of research. The article also discusses how to prepare one's research for publication consideration in peer-reviewed outlets.

AREAS OF INVESTIGATION

While it is possible to describe distance education and e-learning activities in several ways, essentially these activities comprise the following key components. The first is the *management and delivery of distance education and e-learning*. This has everything to do with the organization of all educational activities, its policies, and processes. Then there is *course design and development*, which is about the preparation and production of study materials. However, the production of students' study materials in print and/or other forms does not suggest that any teaching as such has occurred. Teaching and learning starts to happen when the students start to

7 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/researching-distance-education-learning/12315

Related Content

Applications of Agent-Based Technologies in Smart Organizations
László Zsolt Varga (2008). *Online and Distance Learning: Concepts, Methodologies, Tools, and Applications (pp. 2086-2093).*
www.irma-international.org/chapter/applications-agent-based-technologies-smart/27533

The Use of Wiki in Teaching Programming: Effects Upon Achievement, Attitudes, and Collaborative Programming Behaviors
Yu-Tzu Lin, Cheng-Chih Wuand Chiung-Fang Chiu (2018). *International Journal of Distance Education Technologies (pp. 18-45).*
www.irma-international.org/article/the-use-of-wiki-in-teaching-programming/205512

Shifting Mindsets Within: Self-Study of Professional Learning
Brenda Wolodko, Cherry Stewart, Nicole Green, Helen Edwards, Margaret Brooksand Roz Littledyke (2013). *Global Challenges and Perspectives in Blended and Distance Learning (pp. 191-201).*
www.irma-international.org/chapter/shifting-mindsets-within/75653

The Application of Andragogy for the Advanced Diploma Program in Education at Saudi Arabia's Taif University
Obaidalah H. Aljohaniand Sarah M. Alajlan (2021). *International Journal of Information and Communication Technology Education (pp. 1-11).*
www.irma-international.org/article/the-application-of-andragogy-for-the-advanced-diploma-program-in-education-at-saudi-arabias-taif-university/277375

The Effect of Cultural Differences and Educational Technology on Distance Education in the South Pacific
Jonathan Frankand Janet Toland (2009). *Encyclopedia of Distance Learning, Second Edition (pp. 779-786).*
www.irma-international.org/chapter/effect-cultural-differences-educational-technology/11838