



# Who Is Running Online Education Programs?

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Successful online education programs are paramount at higher education institutions. In a recent study to examine the state of online educational commitment in higher education there was a diverse variety of academic and administrative occupations. The wide range of occupations provided a view into institution-wide creative endeavors proposed to broaden the teaching and learning objectives of higher education. Principles, themes, implications and important aspects of online teaching and learning programs and their administrators from state and private four-year institutions with existing programs were explored. A major theme that emerged from the occupations was a student-centered approach to teaching and learning.

*Keywords:* administrators, distance education, higher education, knowledge, learning, management, occupations, online education, teaching

## Introduction

In an original study which examined distance education programs and their commitment to online teaching and learning in higher education, respondents to a survey identified their employment titles from a diverse and surprising variety of occupations.

The wide range of occupations exposed a vacillating and technology-driven domain of online teaching and learning that trumps other teaching and learning genres. Institution-wide creative endeavors proposed to broaden the teaching and learning objectives of online education programs in higher education seemed ambiguously extant in the occupational titles. This naming convention comprised deeper implications than mere occupations and may, perhaps, have extolled the virtues of online teaching and learning, as the result of which much foresight and prudence of academicians occurred toward online education. A major theme that emerged was the student-centered approach to teaching and learning.

## The Purpose of the Study

The purpose of the study was to investigate occupations of those administering online education programs in higher education. Themes, implications and important aspects of online teaching and learning programs from state and private four-year institutions with existing programs were explored.

## Literature Review

Online education administrators' occupations were so varied in nature that the literature review builds a foundation from which this variation of roles can be better understood. Marcus (2004) stated that researchers have not been able to define all the various aspects of an online education leader. Online education administrators frequently come from diverse faculty. Care and Scanlan (2001) posited that the experiences of traditional leaders in distance education are not yet understood. Managers and coordinators of online education programs are different from traditional leaders, administrators, faculty and staff (Dede, 1993). More recently, online teaching and learning has evolved into an enormous industry, replete with challenges not fully understood and practices not completely experienced. Distance education is no longer an isolated program for continuing education but an entity to be absorbed into every field of study in education and almost every enterprise of industry.

Early research, in online education, indicated that the lack of institutional commitment was one of the biggest complaints (Shea, Motiwalla, & Lewis, 2001). The Institute for Higher Education Policy performed an analysis of online teaching and learning research literature and found it had not kept pace with online education use (Merisotis & Phipps, 2000); additionally, leadership had not emerged as an effective aspect. Lee (2001) posited that higher education institutions have rarely been scrutinized for specific leadership in the areas of online education. Beaudoin (2002) believed that leadership in online education was obscured. McLendon and Cronk (1999) argued that not much had been written about academic management and administration of online education programs.

Oftentimes, the online teaching and learning program director position is a temporary assignment; after a few years of service, another faculty member may receive the assignment. Online education administrators may face steep learning curves and feel overwhelmed with administrative duties as they integrate themselves into the field of online teaching and learning (Wright & Howell, 2004), now deeply immersed with technology.

More recent research indicates that commitment to online teaching and learning research has improved (Ding, 2005). Furthermore, and more recently, both quantitative analyses and qualitative analyses, in particular regard to interaction, has ensued (Grandzol & Grandzol, 2010). Managers of online education were cautious in the beginning of the 'new' online movement. Researchers sifted through the online teaching and learning studies searching for validity and reliability. Regardless of the robustness of research in online teaching and learning, or the lack thereof, some skilled faculties rate their experiences with online teaching and learning as posi-

tive (Wiesenmayer, Kupczynski & Ice, 2008; Ward Ulmer, Watson & Derby, 2007).

Much research on perceptions of online students has revealed positive student experiences. The US Department of Education released a report, based on data collected between 1996 through 2008, which concludes that online students perform better than face-to-face. Online students ranked in the 59th percentile in tested performance, compared with the average classroom student scoring in the 50th percentile (Means, Toyama, Murphy, Bakia, & Jones, 2010).

The responsibility of course administrators is the most important factor in the short-term success of online education (Brooks, 2003). Current research has yet to define what an online teaching and learning leader is made of; however, Marcus (2004) indicates that online education leader characteristics and their requirements and actions define the effective online education leader.

### Methodology

The instrument was designed using a modification of Dillman and Bowker's (2001) 14 principles of design of Web surveys. Questions were aligned on the survey based upon Babbie's (1998) recommendation for the optimal survey design. A 7-point Likert-type scale was used for the response key of the 27-question survey. The reliability of the instruction is based upon Nunnally's (1978) notion that a 7-point scale or higher is more likely to reach the upper limits of reliability. Ensuring a high degree of construct validity, the instrument was reviewed for content, clarity and brevity by a panel of seven PhD faculty members from two universities and who served in various university departments: Continuing Education, Agricultural Education, Workforce Education and Development, and Human Resources. Since this instrument was not first a paper-based instrument but was designed specifically for the Web, its reliability and validity was strengthened.

A pilot of the instrument was sent to 32 randomly selected institutions from the 2005 Petersen's Guide to Distance Learning Programs. All respondents declared themselves as responsible for online teaching and learning programs.

A census was used for obtaining the data for this study since the entire population was identified and available for participation (Robinson, 2005). The researcher obtained respondents from e-mail requests. Along with the linked survey, the name, title, organization, email, and comments were requested. The reporting phase of the online survey involved extracting the data from two hypertext pre-processor databases designed by an instructional technologist. Data were collected in 2006, and research took place from a non-participating university in 2007.

**Table 1** Hierarchy of Administrator Occupations, Their Frequencies, Percentages, and Overall Percentages

Administrator Occupation ( <i>n</i> = 74)	Frequency	Percent	Overall
Vice Provost	1	1.35	0.82
Vice President	1	1.35	0.82
Associate VP	1	1.35	0.82
Director	44	59.46	36.07
Associate Director	5	6.76	4.10
Assistant Director	7	9.46	5.74
Registrar	1	1.35	0.82
Manager	6	8.11	4.92
Coordinator	4	5.41	3.28
Instructional Designer	1	1.35	0.82
Academic Advisor	1	1.35	0.82
Administrative Assistant	1	1.35	0.82
Graduate student/assistant	1	1.35	0.82
Total	74	100	60.66

### Survey Participants

The criterion for selection of the participants was specific to the institution and not the individuals. Individuals responsible for online teaching and learning programs represented institutions of different sizes and types and came from different departments and colleges of the institutions surveyed. Noteworthy in this study, and the focus of this paper, were the variety of titles that individuals responsible for online teaching and learning programs identified themselves as holding in their prospective online teaching and learning occupations.

Out of 4,800 online learning programs listed in Peterson's Guide to Distance Learning Programs (Oram, 2005), state and private four-year institutions with existing online teaching and learning programs were surveyed. In order to better manage the study, only those universities and colleges in the Carnegie basic classification offering undergraduate and graduate degrees served as the study population ( $n = 374$ ). The Carnegie classification 2005 update is the sixth revision since the first edition in 1970. Carnegie classifications were obtained from a Web site sponsored by the 2005–2006 Carnegie Foundation for the Advancement of Teaching (2005). Three basic classifications of institutions were used in this study: (a) Classification I: Research Universities; (b) Classification II: Master's Colleges and Universities; and (c) Classification III: Baccalaureate Colleges. Within three basic Carnegie classifications, 374 institutions were identified. The final usable sample obtained was  $N = 127$  with an overall response rate of 34 percent. Not all respondents reported their occupations.

**Table 2** Hierarchy of Educator Occupations, Their Frequencies, Percentages, and Overall Percentages

Educator Occupation ( <i>n</i> = 48)	Frequency	Percent	Overall
Dean	7	14.58	5.74
Associate Dean	3	6.25	2.46
Assistant Dean	3	6.25	2.46
Chair	3	6.25	2.46
Professor	15	31.25	12.30
Associate Professor	8	16.67	6.56
Assistant Professor	3	6.25	2.46
Adjunct Professor	1	2.08	0.82
Adjunct Faculty	1	2.08	0.82
Communications Specialist	1	2.08	0.82
Instructional Technologist	3	6.25	2.46
Total	48	100	39.34

## Findings

Occupations were separated into two categories: Administrator Occupation and Educator Occupation (*n* = 122). Presented in Table 1 are the most frequently listed administrator occupations (*n* = 74), percentages, and overall percentages. The most frequent occupation from the list of titles was identified as 'Director' (*n* = 44) following or preceding various descriptive labels. This finding was not a surprise as educational programs are largely run by directors.

Table 2 presents the most frequently listed educator occupations (*n* = 48), percentages, and overall percentages. The most frequent educator occupation was 'Professor' (*n* = 15). One title was considered miscellaneous: Esq.

Table 3 presents nine occupational descriptive terms preceding or following and/or associated with occupations listed in Tables 1 and 2. The occupation descriptive terms when ranked evolved as representing possible themes, premises or principles in online teaching and learning. The term of 'learning' appeared most often (*n* = 27, 21%), and the term of 'distance' appeared next most often (*n* = 25, 20%).

## Results and Discussion

A major theme of today's online teaching and learning is the social presence theory and a focus on students that we have never seen before. Kember (2009) describes a university-wide endeavor to promote student-centered learning in which he warns that programs that rely on 'didactic forms of teaching run the danger of reinforcing the preference for passive forms of learning' (p. 12). The descriptive term 'learning' appeared most often

**Table 3** Ranked occupational descriptive terms, frequencies, and percentages

Term	Frequency	Percent
Learning	27	25.71
Distance	25	23.81
Online	16	15.24
Technology	12	11.43
Instructional	10	9.52
Services	5	4.76
Design	4	3.81
Continuing	4	3.81
Teaching	2	1.90
Total	105	100

( $n = 27$ ) in the list of titles, while the term 'teaching' occurred only twice. Based on these occurrences, research literature and online teaching experience, the major premise that emerged was a theme that encompasses the student-centered approach to learning. Assessment is learner-centered, thus evaluation of student learning is promising and achievable through online education.

The term 'learning,' deemed as knowledge creation, comprises an assertion that involves the philosophy of constructivism. Duffy and Jonassen (1992) touted that constructivism is the new theory that is being used for representing the knowledge construction process in online education. Constructivism offers a promising new approach to teaching which offers students the opportunity to build knowledge on what they already know. The research indicates using constructivist methods, in online teaching and learning, furnishes a more experimental learning environment in which the student can develop critical-thinking skills and improve the transfer and retention of knowledge (Ward, 2001). Interactive constructivism provides a basis that 'our views regarding learners and learning communities are always ambiguous and ambivalent constructions that need to be kept open for further deconstructions and reconstructions' (Neubert, 2010, p. 502).

Kang and Gyorke (2008) compared Moore's transactional distance learning theory with cultural-historical learning theory to posit that transactional distance learning 'isolates learners from their multi-society contexts' (p. 212). Meeting students on their own terms, and scaffolding what students already know with what the instructor can build upon combined with quality interactivity provides what students need. Moller, Foshay and Huett (2008) stated that 'our educational system is producing learners who prefer to interact with the content and the instructor, but not each other' (p. 72). Students with the proclivity to become online learners want to be the willing receptacles of information but long for personal interactions, thus the

emergence of the social presence theory. They want relevant learning that is applicable in the workplace, and facilitation and support of their own discoveries to then remix and share (Berry, 2010).

A trifecta theme that emerged from the occupations was the terms 'distance' (20%), 'online' (13%), and 'technology' (9%), with a total of 53 occurrences (42%). The iconic beginning event of technology changed the way in which online teaching and learning administrators envisioned education from a distance using the Web, the Internet and Course Management Systems (CMS). Online education has introduced many students to technology in such a way that they might not have had the opportunity to experience before. For example, MS Word's Track Changes feature provides opportunities for students to collaborate and instructors to grade papers. Fragmented research began to appear in abundance in the area of online teaching and learning and the practices surrounding the impact that technology has had on education. Researchers passed harsh judgment on the literature in online education because of the weakness in research rigor (Gunawardena & Mclsaac 2004). In 2003, distance learning educators were negligent in providing sufficient attentiveness as to how research methodology and the research paradigm should be used in online teaching and learning according to Simonson, Smaldino, Albright, and Zvacek (2006).

Just one year prior, Kelly (2002) observed that rules were changing in higher education regarding online teaching and learning, corporate degrees and dot.coms in education and training. In a Delphi study of 103 online teaching and learning experts, roles and competencies of online education professionals within the United States and Canada were identified: (1) Interpersonal Communication, (2) Planning Skills, (3) Collaboration/Teamwork Skills, (4) English Proficiency, (5) Writing Skills, (6) Organizational Skills, (7) Feedback Skills, (8) Knowledge of the Online Teaching and Learning Field, (9) Basic Technology Knowledge, and (10) Technology Access Knowledge (Thach & Murphy, 1995). Kelly's (2002) first role and competency, Interpersonal Communication, suggests a significant connection to the theme of social presence theory, which is so important to online teaching and learning today. Online education administrators must consider adding to professional development programs techniques of how to better interact with online students to incorporate that important teacher/student connection. Hall (2010) adds inter-subjectivity to the interactive theory as the next tier in increasing the quality of course-based, online learning. Hall defines the idea of interaction as a process and a key point in distinguishing interaction from inter-subjectivity. Inter-subjectivity is the product of knowledge construction resulting from the coordination of multiple perspectives among learners. Inter-subjectivity can occur when students are engaged in quality-designed discussion boards, wikis, blogs, clickers, journals, Twitter and Facebook ac-

tivities or live lectures using Skype, uStream, DimDim or Adobe Connect Pro, for example.

The less frequent listed descriptive terms were 'services' ( $n = 5$ ), 'continuing' ( $n = 4$ ), and 'teaching' ( $n = 2$ ). Peripheral services for online education can include library or bookstore services, and non-degree coursing through continuing education. Twenty-first century teaching is undoubtedly moving away from the teaching-centered education approach. This study found the term 'teaching' appearing the least number of times.

### **Instructional Design**

While the term 'instructional' appears ten times in the list of occupations, the title 'instructional design(er)' appears only four times. Issues about how to design distance learning systems remain open (Salas & Cannon-Bowers, 2001). Concerns in online teaching and learning lie in whether foundational online instructional design theory is being piloted and applied appropriately to course material before it is utilized (Cook-Wallace, 2007). Some argue that instructional design and the technology of online courses are not as important to study as online pedagogy. However, to evade the foundation of instructional design with respect to online teaching and learning would be tantamount to abolishing online education research rigor. Moller et al, (2008) indicate that most online training programs lack effectiveness because of the lack of basic principles of instructional design. The likely reason is that the administrators of e-learning, 'have never encountered a product built according to sound instructional design principles' (p. 71). Gayton (2009) reported that all administrators ( $n = 16$ ) in his study of eight randomly selected institutions had never delivered an online teaching and learning course. Regardless of the container of online education such as Blackboard (most popular), Moodle, Joomla, and eCollege among other CMS's, instructional design helps deliver online teaching and learning programs when instructional designers are major contributors.

### **Role of Online Education Administrator**

Online education administrators frequently come from diverse faculty ranks with no more than a scant amount of technology skills, yet they are responsible for the delivery of online teaching and learning using the latest technology. Online teaching and learning imparts new roles for administrators, professors, and staff to assume. Traditional faculty members who choose online teaching will require a shift in their role from teaching (Appana, 2008) to mentor, instructional designer, manager, and technologist. How they use course materials, whether royalties can be kept and by whom, and the potential of intellectual property and patenting of research, are only a few of



the additional challenges. Rekkedal (1994) recommends that professionals and managers in online education generally should have 'some training in research methods, statistics and basic problems concerned with generalizations, validity and reliability of results from empirical research' (para. 64). Therefore, a framework for online teaching and learning involving planning, designing, delivering and assessing can be established, whereas such frameworks are currently lacking in online teaching and learning according to Gaytan's (2009) study.

### Training

One of the many challenges for online education administrators is the allocation of time necessary for faculty to prepare to teach online. It is estimated that approximately one year of preparation is necessary for those faculty staff who have not yet taught online. Seasoned educators may tend to avoid transitioning a course to online because of the trepidation of utilizing technology, and the pedagogical challenge of repurposing a face-to-face, well-worn course to an online format. Faculty resistance to teaching online is not new (Morgan, 2003). A recent report indicated that over 70 percent of respondents in a survey study agreed that faculty resistance to teaching online is the major factor 'that impedes institutional efforts to expand online education programs' (Green and Wagner, 2011, para. 9).

Few universities 'offer training on how to actually teach an online or hybrid course with strong pedagogy' (Cole & Kritzer, 2009, p. 36). Online teaching and learning administrators must assist faculty staff in regaining pedagogical skills for online teaching and learning. It is uncharted territory for many administrators and educators who find themselves assigned to positions that involve online pedagogy. However, those skills are similar to traditional pedagogical skills. Findings from experienced, award-winning South Dakota e-learning instructors provide effective pedagogical practices that include fostering relationships, engagement, timeliness, communication, organization, technology, flexibility and high expectations (Bailey & Card, 2009).

An important event in online education today is the transition from small scale experimental courses to large scale operations (Paulsen, 2003). The very foundation of higher education may soon be placed upon online learning pedagogy. The preparation activities should require that faculty take an online course geared toward social presence theory. Gaytan (2009) reported that most faculty training involved learning how to use the technology. Online faculty staff need help to envision, design, and facilitate online courses. Furthermore, faculty development will need fine tuning of pedagogy while the migration from the teacher-centered approach to the student-centered approach continues to emerge.

## Trends

Hannum (2009) suggests the phrase 'distance education' has morphed into distributed education or distributed learning. Allen and Seaman (2010) report that 66 percent of all reporting institutions state that 'online learning was a critical part of their institution's long term strategy' (p. 2). Yet, there has not been as much attention to identifying what constitutes structural arrangements to support online programs and online teaching and learning at higher institutions. Marek (2009) suggests a model of institutional support that includes faculty course release, program level training and support, and structured mentoring.

Paolucci and Gambescia (2007) analyzed 239 universities in which at least one graduate degree was fully online. They identified the range of general administrative structures used by universities in which online degree programs are offered. The researchers then categorized the range of options used for the general administration of online education programs as either internal or external. Six structures were identified, three as internal: Academic Department, Continuing Education/Professional Studies and Online Teaching and Learning Unit. Three external structures were identified: Alliance, Outsource, and Consortium. Consortia can pool academic resources such as libraries, laboratories, and research funding. The University of Louisiana Lafayette (n. d.) features a website with statements regarding institutional context and commitment to distance learning with a university vision statement, and a commitment to academic quality and rigor in electronic environments. Their Office of Distance Learning website also features a Sloan Consortium community member logo. Finally, Paolucci and Gambescia's (2007) study revealed that 62 percent of institutions use academic departments to deliver online teaching and learning and 90 percent to deliver their graduate online programs. A more recent trend is the use of online education divisions as the preferred internal administrative units.

The US Department of Labor (O\*NET, 2010) lists Distance Learning Coordinator as one of the Bright Outlook occupations under the category of 'rapid growth, new and emerging.' The occupation of Online Distance Coordinator is projected to grow 20 percent or more over the period of 2008–2018. O\*NET describes Distance Learning Coordinator job tasks of day-to-day operator of distance learning and scheduler of courses. The title represents an occupation for which data collection is currently underway, an indication of the vagueness of this newly developing occupation.

## Recommendations

The most effective way to improve the quality of learning, according to Al-Fadhli (2009), is through distance education. Quality of online education and appropriate research of online education is a principal concern. Han-

nafin, Hannafin and Gabbitas (2009) encourage online teaching and learning administrators to research and focus on 'design and performance questions using methods that extend and refine research, theory, and practice' (p. 781). For example, the impact on student retention of course material is not fully understood (Lei & Gupta, 2010). Organizational structures for online teaching and learning do not necessarily support student learning outcomes (Gaytan, 2009). Gaytan also reported that because of the lack of interactivity in online education, the quality of education was not as high as in traditional education. Donavant (2009) warns administrators and trainers to avoid placing courses online just because of rising cost or other impediments. Professional development education must be multifaceted to benefit the needs of online instructors.

### Researcher's Online Teaching Experience

'The job of a teacher is to be faithful to authentic student learning' (Alber, 2011). This statement embodies my 12 years of online teaching experience in higher education. The online students each chose their fate of my online business communication course, unaware of the rigor involved, but it is rigor that is so important for a prestigious institution of higher learning. Over my years of teaching online, I learned that each student's needs became many student needs. From either frustration or procrastination on their part, or precision writing requirements on my part, I learned the differences of online versus face-to-face student needs. Online students want lots of flexibility, they rarely read their textbooks, and they mostly access the assignments and exams without much, if any, preparation. Whether they experience technology problems from a video business presentation assignment or from writing from their own statistical findings, authentic student learning mediates from timely and gently written emails, announcements and assignment feedback with an upbeat tone. They need multiple opportunities to revise, rewrite and re-evaluate their work, for this is where the authentic student learning occurs.

### References

- Alber, R. (2011, December 6). Three ways student data can inform your teaching [Web blog comment]. Retrieved from <http://www.edutopia.org/spiralnotebook/rebecca-alber>
- Al-Fadhli, S. (2009). Factors influencing the acceptance of distance learning: A case study of Arab Open University of Kuwait. *Online Journal of Distance Learning Administration*, 12(3). Retrieved from <http://www.westga.edu/~distance/ojdl/fall123/alfadhli123.html>
- Allen, I. E., & Seaman, J. (2010). *Class differences: Online education in the US, 2010*. Retrieved from [http://sloanconsortium.org/publications/survey/pdf/class\\_differences.pdf](http://sloanconsortium.org/publications/survey/pdf/class_differences.pdf)

- Appana, S. (2008). A review of benefits and limitations of online learning in the context of the student, the instructor and the tenured faculty. *International Journal on E-Learning*, 7(1), 5–22.
- Babbie, E. R. (1998). *Survey Research Methods* (2nd ed.). Belmont, CA: Wadsworth.
- Bailey, C. J., & Card, K. A. (2009). Effective pedagogical practices for online teaching: Perception of experienced instructors. *The Internet and Higher Education*, 12(3–4). Retrieved from EBSCO, Academic Search Premier. doi:10.1016/j.iheduc.2009.08.002
- Beaudoin, M. F. (2002). Online teaching and learning leadership: An essential role for the new century. *Journal of Leadership & Organizational Studies*, 8(3), 131–144.
- Berry, B. (Producer). (2010, January 17). *Creating a student-centered profession* [Video]. Retrieved from <http://www.youtube.com/watch?v=J210xviKaHQ&feature=related>
- Brooks, L. (2003). How the attitudes of instructors, students, course administrators, and course designers affects the quality of an online learning environment. *Online Journal of Distance Learning Administration*, 4(4). Retrieved from <http://www.westga.edu/~distance/ojdla/winter64/brooks64.htm>
- Care, W. D., & Scanlan, J. M. (2001). Planning and managing the development of courses for distance delivery: Results from a qualitative study. *Online Journal of Distance Learning Administration*, 4(2). Retrieved from <http://www.westga.edu/~distance/ojdla/summer42/care42.html>
- Carnegie Foundation Advancement for Teaching Classification of Institution (2005). *2005 Carnegie Classification Initial Release*. Retrieved from <http://www.carnegieclassification-preview.org/index.aspx>
- Cole, J. E., & Kritzer, J. B. (2009). Strategies for success: Teaching an online course. *Rural Special Education Quarterly*, 28(4), 36–40.
- Cook-Wallace, M. K. (2007). *Perceptions of university level online teaching and learning agents with respect to commitment, administration and technology*. (Doctoral dissertation, Southern Illinois University Carbondale).
- Dede, C. (1993). Leadership without followers. *Computing Teacher*, 20(6), 9–11.
- Ding, X. (2005). The current situation, trends and countermeasures of development of online teaching and learning in China: Report from an international conference; The 18th Annual Meeting of AAOU (Association of Open Universities), Shanghai 2005. In X. Y. Li (Ed.), *Quality education for all* (pp. 182–206). Retrieved from EBSCO.
- Dillman, D. A., & Bowker, D. (2001). *The Web questionnaire challenge to survey methodologists*. Retrieved from [http://www.sesrc.wsu.edu/dillman/zuma\\_paper\\_dillman\\_bowker.pdf](http://www.sesrc.wsu.edu/dillman/zuma_paper_dillman_bowker.pdf)
- Donavant, B. W. (2009). The new, modern practice of adult education: Online instruction in a continuing professional education setting. *Adult Education Quarterly*, 59(3), 227–245.

- Duffy, T. M., & Jonassen, D. H. (Eds.). (1992). *Constructivism and instructional design*. Hillsdale, NJ: Lawrence Erlbaum.
- Gaytan, J. (2009). Analyzing online education through the lens of institutional theory and practice: The need for research-based and -validated frameworks for planning, designing, delivering, and assessing online instruction. *The Delta Pi Epsilon Journal*, 51(2), 62–75.
- Grandzol, C. J., & Grandzol, J. R. (2010). Interaction in online courses: More is NOT always better. *Online Journal of Distance Learning Administration*, 13(2). Retrieved from [http://www.westga.edu/~distance/ojdla/summer132/Grandzol\\_Grandzol132.html](http://www.westga.edu/~distance/ojdla/summer132/Grandzol_Grandzol132.html)
- Green, K. C. & Wagner, E. (2011). Online education: Where is it going? What should boards know? *Trustee*, 1(19). Retrieved from <http://agb.org/trusteeship/2011/1/online-education-where-it-going-what-should-boards-know>
- Gunawardena, C. N., & Mclsaac, M. (2004). Online teaching and learning. In D. H. Jonassen (Ed.), *Handbook of research for educational communication and technology* (2nd ed., pp. 355–396). Mahwah, NJ: Erlbaum.
- Hall, B. (2010). Interaction is insufficient: Why we need inter-subjectivity in course room discourse. *Journal of eLearning and Online Teaching* 1(12) Retrieved from [http://www.theelearninginstitute.org/journal\\_pdf/JeOT%20-%20Interaction%20is%20Insufficient%20-%20Why%20We%20Need%20Intersubjectivity%20in%20Course%20Room%20Discourse.pdf](http://www.theelearninginstitute.org/journal_pdf/JeOT%20-%20Interaction%20is%20Insufficient%20-%20Why%20We%20Need%20Intersubjectivity%20in%20Course%20Room%20Discourse.pdf)
- Hannafin, M., Hannafin, K., & Gabbitas, B. (2009). Re-examining cognition during student-centered, Web-based learning. *Education Tech Research Dev*, 57, 767–785. doi:10.1007/s11423-009-9117-x
- Hannum, W. (2009). Reflections: Moving online teaching and learning research forward. *Online Distance Education*, 30(1), 171–173.
- Kang, H., & Gyorke, A. S. (2008). Rethinking distance learning activities: a comparison of transactional distance theory and activity theory. *Open Learning*, 23(3), 203–214. doi:10.1080/02680510802420050
- Kelly, F. M. (2002). The political implications of e-learning. *Higher Education in Europe*, 27(3), 211–216.
- Kember, D. (2009). Promoting student-centered forms of learning across an entire university. *Higher Education*, 57(1), 1–13. doi:10.1007/s10734-008-9177-6
- Lee, J. (2001). Instructional support for online teaching and learning and faculty motivation, commitment, satisfaction. *British Journal of Educational Technology* 32(2), 153–160.
- Lei, S. A., & Gupta R. K. (2010). College online teaching and learning courses: Evaluating benefits and costs from institutional, faculty and students' perspectives. *Education*, 130(4), 616–631.
- Louisiana Lafayette, University of (n.d.). *Office of Distance Learning*. Retrieved from <http://distancelearning.louisiana.edu/content/institutional-context-and-commitment>
- Marcus, S. (2004). Leadership in online teaching and learning: Is it a unique type of leadership – A literature review. *Online Journal of Distance Learning*

- Administration*, 7(1). Retrieved from <http://www.westga.edu/~distance/ojdla/summer42/care42.html>
- Marek, K. (2009). Learning to teach online: Creating a culture of support for faculty. *Journal of Education for Library & Information Science*, 50(4), 275–292.
- McLendon, E., & Cronk, P. (1999). Rethinking academic management practices: A case of meeting new challenges in online delivery. *Online Journal of Distance Learning Administration* 2(1). Retrieved from <http://www.westga.edu/~distance/ojdla/spring21/mclendon21.html>
- Means, B., Yoyama, Y., Murphy, R., Bakia, M., & Jones, K. (2010). *Evaluation of evidence-based practices in online learning: A meta-analysis and review of online learning studies*. Retrieved from <http://www2.ed.gov/rschstat/eval/tech/evidence-based-practices/finalreport.pdf>
- Merisotis, J. P. & Phipps, R. A. (2000). *Quality on the line: Benchmarks for success in internet-based distance education*. Retrieved from <http://www.ihep.org/assets/files/publications/m-r/QualityOnTheLine.pdf>
- Moller, L., Foshay, W. R., & Huett, J. (2008). The evolution of online teaching and learning: Implications for instructional design. *TechTrends*, 52(3), 66–70.
- Morgan, G. (2003). *Faculty use of course management systems* (EDUCAUSE Research Reports 2). Retrieved from <http://www.educause.edu/ECAR/ResearchPublications/ResearchReports/1010>
- Neubert, S. (2010). Democracy and education in the twenty-first century: Deweyan pragmatism and the question of racism. *Educational Theory*, 60(4), 487–502. doi:10.1111/j.1741-5446.2010.00372.x
- Nunnally, J. C. (1978). *Psychometric theory*. NY: McGraw Hill.
- O\*NET Online (2010). *Browse bright outlook occupations*. Retrieved from <http://www.onetonline.org/find/bright?b=0&g=Go>
- Oram, F. A. (Ed.). (2005). *Peterson's guide to distance learning programs*. Lawrenceville, NJ: Thomson/Peterson's.
- Paolucci, R., & Gambescia, S. F. (2007). Current administrative structures used for online degree program offerings in higher education. *Online Journal of Distance Learning Administration*, 10(3). Retrieved from <http://www.westga.edu/~distance/ojdla/fall103/gambescia103.htm>
- Paulsen, M. F. (2003). *Online Education and Learning Management Systems: Global E-learning in a Scandinavian Perspective*. Bekkestua: NKI Forlaget.
- Rekkedal, T. (1994). *Research in online teaching and learning: Past, present and future*. Retrieved from <http://www.nettskolen.com/forskning/29/intforsk.htm>
- Robinson, W. C. (2005). *Sampling IS 540: Research Methods* [online course]. Retrieved from [http://web.utk.edu/~wrobinso/540\\_lec\\_sample.html](http://web.utk.edu/~wrobinso/540_lec_sample.html)
- Salas, E., & J. Cannon-Bowers. (2001). The science of training: A decade of progress. *The Science of Training*, 52, 471–499.
- Shea, T., Motiwalla, L., & Lewis, D. (2001). Internet-based online teaching and learning – the administrator's perspective. *Journal of Education for Business*, 77(2), 112–117.

- Simonson, M., Smaldino, S., Albright, M., & Zvacek, S. (2006). *Teaching and learning at a distance: Foundations of online teaching and learning* (3rd Ed.). Upper Saddle River, NJ: Pearson Education.
- Thach, E. C., & Murphy, K. L. (1995). Competencies for online teaching and learning professionals. *Educational Technology Research and Development*, 43(1), 57–79.
- Ward, C. D. (2001). Under construction: On becoming a constructivist in view of the standards. *The Mathematics Teacher*, 94(2), 94–96.
- Ward Ulmer, L., Watson, L. W., & Derby, D. (2007). Perceptions of higher education faculty members on the value of online teaching and learning. *The Quarterly Review of Online Distance Education*, 8(1), 59–70.
- Wiesenmayer, R., Kupczynski, L., & Ice, P. (2008). The role of technical support and pedagogical guidance provided to faculty in online programs: Considerations for higher education administrators. *Online Journal of Distance Learning Administration*, 11(4). Retrieved from <http://www.westga.edu/~distance/ojdl/winter114/wiesenmayer114.html>
- Wright, T. & Howell, S. (2004). Ten efficient research strategies for distance learning. *Online Journal of Distance Learning Administration*, 7(1). Retrieved from <http://www.westga.edu/~distance/ojdl/spring71/wright71.html>

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