Effective Facilitation Methods for Online Teaching

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The demand for a flexible educational opportunity led to the 'anytime, anywhere' distance learning based on technology-mediated instructional designs. Such educational design integrates a multi-sensory approach to maximize learning opportunities and outcomes. Learning in this format is goal-oriented and centered on the learner, driven by personal situations of time and distance, as well as work and family responsibility constraints. This paper examines effective facilitation methods for online teaching and principles of best practices for use in an online nursing learning program. The aim of such a review is to ensure adequate online instructional designs the goal of which is to maximize students' learning opportunities and outcomes. The needs of online learners reflect those of face-to-face learners and more due to physical and geographical distance. The unique characteristics of the learner and the adult learning principles guide the behaviors of the instructor in online nursing programs. Effective facilitation methods of online teaching entail commitment on the part of the management in educational institution in creating an integrative learning environment that promotes a sense of community, social presence, and connectedness with resources that facilitate personal and collective interactions between and among faculty and students.

1. Introduction

Accelerated changes propelled by technology characterize the 21st century. The technology has greatly influenced higher education in general, and nursing education in particular. Twenty-first century learners have perceptive technological abilities, and are interested in participatory active learning of technology-delivered education. Revell and McCurry (2010) maintained that educators have demonstrated an understanding of the learners' perceptive technological abilities and needs by adopting teaching strategies that incorporate technology and focus on active learning for efficient outcomes. The teaching strategies entail the design, development, and implementation of instructional designs that integrate a multi-sensory approach to maximize learning opportunities and outcomes.

Instructional designs that integrate a multi-sensory approach occur through the World Wide Web in three different formats. The formats range from web support to hybrid, and web-based (online) delivery strategies (O'Neil, Fisher and Newbold, 2004; Sandars and Lafferty, 2010; Bristol and Zerwekh, 2011). These delivery strategies apply technology in varying degrees. According to Bristol and Zerwekh (2011), in a web-supported course design, the instructor uses a learning management system (LMS) to enhance the traditional classroom teaching and learning experiences. Continuing, the authors maintained that the web-based or online design entails the delivery of the entire course content via a computer network, while a hybrid or blended course design combines the attributes of online and traditional face-to-face delivery

format. Each of these delivery formats appeals to different kinds of learners depending on circumstances and learning styles.

The web-based or online modality known as e-learning is an educational trend in a virtual classroom for individuals who have conflicts with the traditional learning options. Learning for such individuals is goal-oriented and centered on the learner, driven by personal situations of time and distance, as well as work and family responsibility constraints. In order to maximize learning opportunities and outcomes, instructors and learners separated by geographical or physical distance use technological innovations in various configurations, instructional methods, and presentation formats of web-based learning (Cook, et al., 2010) to interact in a synchronous (real time) or asynchronous (delayed) manner. The different modes of written communication and interactions between and among students and faculty are the core of online teaching and learning. According to O'Neil, Fisher and Newbold (2004), online learning will be a lonely and isolated experience without active quality interaction between and among students and faculty. Active quality online learning experiences entail a great deal more than mere posting of class materials and content on the web (O'Neil, Fisher and Newbold, 2004; Gallien and Oomen-Early, 2008; Floyd, Hughes and Maydosz, 2011). Effective facilitation methods for online teaching and principles of best practices for use in an online learning program such as nursing derived from literature ensure adequate online instructional designs the goal of which is to maximize students' learning opportunities and outcomes.

2. Literature Review on Effective Facilitation Methods for Online Teaching

The learner is at the center of any effective teaching and learning process irrespective of the delivery format, but more so in online format due to the absence of physical connectedness. In the absence of physical contacts, the learner actively and independently, or in collaboration with other learners, interacts with the learning environment, which consists of content, faculty, activities, and peers in order to construct meaning and knowledge (O'Neil, Fisher and Newbold, 2004). Facilitation methods for the learner-centered instructions in the online teaching environment focus on attaining the critical success factors of online teaching based on the learner's characteristics and needs. The learner's characteristics and needs guide the instructor in the creation of specific instructional design techniques in a positive learning culture and social presence through online communities that meet the needs of the students. According to Bonk and Zhang (2008), effective online teaching methods address the needs, expectations, and learning styles of the different types of online learners. Such teaching methods maximize learning opportunities for efficient learner outcomes.

3. Characteristics and Needs of Online Learners

Knowledge of the characteristics of online learners ensures effective presentation and delivery of learner-focused instructions. According to Palloff and Pratt (2003), online learners are composed of traditional and nontraditional undergraduates, graduates, and continuing education students of varying generations, cultures, learning styles, reading and writing abilities, computer literacy skills, and social and economic statuses, as well as educational experiences and expectations. Each learner's characteristics bring a wide variety of attributes to the learning experience that affects their online learning abilities (Sandars and Lafferty, 2010).

The Net Generation, unlike the typical adult learner, grew up with technology and routinely uses computers, cell phones, and the Internet as a means to communicate, socialize, obtain information, and complete school or work-related assignments (Mastrian, et al., 2011). Palloff and Pratt (2003) categorized successful characteristics of online learners into seven general areas that include computer access and skills, openness, communication skills, commitment, collaboration, reflection, and flexibility. Similarly, O'Neil, Fisher and Newbold (2004) noted that successful online students are highly self- motivated, self-directed, independent, active learners capable of adapting to new learning environments and possessing organizational and time management skills.

Based on these characteristics, the instructor develops a learner-focused, self-directed online learning experience. The instructor facilitates learner-focused learning through the ability to be flexible, collaborate, and move away from the traditional faculty role by giving up control to the learners. According to Palloff and Pratt (2003), these instructor characteristics form the core of the effective facilitation skills for online teaching. Rather than being expert authorities, the instructors in an online learning environment facilitate, mentor, and coach the learner's acquisition of knowledge in a way that promotes active involvement and self-direction. Self-directed active learning based on the constructivist view of learning, where learners construct meaning based on collaboration and interaction among themselves and instructors, has positive effects on the academic success of online learners (O'Neil, Fisher and Newbold, 2004; Bell, 2007; Shinkareva and Benson, 2007; Legg, et al., 2009). Supporting these studies, Mei-Mei and Chiung-Mei (2009) noted that students learn better when given control over their learning. Similarly, McCown (2010) and Merriam (2008) affirmed that self-directed learning is an empowering process that helps students learn how to learn for themselves and motivates adult learners. Three factors of self-directed learning, notably active learning, love of learning, and independence were significant predictors in online learning effectiveness of civil servants (Lai, 2011). Overall, self-direction, with its inherent autonomy and responsibility for one's own learning, entails adult learners' active participation and involvement in their own learning for efficient outcomes.

The needs of online learners for efficient outcomes reflect those of face-to-face learners and more due to physical and geographical distance. The physical and geographical distance mediated by technology necessitates a user-friendly around-the-clock strong technological infrastructure with technical support (Palloff and Pratt, 2003; O'Neil, Fisher and Newbold, 2004; Cornelius and Glasgow, 2007). A user-friendly technological infrastructure provided by the learning institution facilitates effective online teaching through the design of an efficient online learning community and the creation of learning activities that promote interaction with the course content, the instructor, and the learners.

4. Instructional Design Techniques in an Online Learning Community

The creation of online learning communities facilitates effective online teaching. The learning community, characterized by interaction and collaboration, is the central feature in online teaching and learning for the delivery of the curriculum (Palloff and Pratt, 2007). The learner-content, learner-instructor, and learner-learner interaction is a critical success factor in

the level of student learning and satisfaction in a technology-mediated environment (O'Neil, Fisher and Newbold, 2004; Gallien and Oomen-Early, 2008; Maring, Costello and Plack, 2008; Ali, 2009; Mastrian, et al., 2011). According to Mastrian, et al. (2011), online communities facilitate effective online teaching by fostering collaboration and shared learning, which stimulates reflective and critical thinking for high-quality learning experiences. Such interactions using appropriate synchronous and asynchronous communication tools eliminate the physical, timing, and geographical isolation of online learning environment to build a community where learners have a sense of belonging and connection to an institution for a collaborative learning experience. The technology-mediated communication tools facilitate effective online teaching as they align with the characteristics and needs of online learners.

Literature abounds and supports technology-mediated online communities as a critical factor of effective facilitation methods in online teaching and learning experiences. Developing an online learning community facilitates online teaching by enabling the instructor to effectively design the course, create collaborative assignments, facilitate active discussion, and promote the development of students' critical thinking and research skills (O'Neil, Fisher and Newbold, 2004; Palloff and Pratt, 2007; Ryman, et al., 2010; Bristol and Zerwekh, 2011; Mastrian, et al., 2011; Wong and Abbruzzese, 2011). Such active and collaborative teaching yields co-created knowledge and fosters transformational learning. Online learning communities facilitate transformative learning through the instructors' creation of active instructional strategies that meet individual learning styles.

Effective online teaching involves students' engagement and active interaction with the environment according to their individual learning styles. Learners have a combination of visual, auditory, and kinesthetic learning styles that are applicable to different learning situations. According to Bonk and Zhang (2008), the reading, reflecting, displaying, and doing models of learning styles and preferences, which closely align with the verbal, auditory, reflective, and kinesthetic (VARK) learning styles, provide a framework for the design of efficient online learning environments and activities. Each learning style has corresponding learning preferences and activities with matching technological resources and tools for efficient learning outcomes. The integration of varied classroom instructional strategies through the application of the different appropriate media technology enable the instructor to meet the learners' different styles and preferences for learning (Palloff and Pratt, 2003; Bonk and Zhang, 2008; DeYoung, 2009). Online teaching methods incorporate varied teaching strategies such as lecture, discussion, questioning, and use of audiovisuals, as well as the more active teaching strategies of cooperative learning, simulations, role playing, demonstration, concept-mapping, reflection/journal, case studies, problem-based learning, and self-learning modules (DeYoung, 2009; Rowles and Russo, 2009). Media technology facilitates the integration of active teaching strategies in the online learning experience.

Media technology that uses models, images, audio, and videos integrated with the teaching strategies enables instructors to create meaningful teaching and learning experiences (Zwirn and Muehlenkord, 2009). According to the authors, these media, typically categorized as realia and models, projected and non-projected still visuals, moving visuals, and audio media create an active teaching and learning online environment. Overhead transparencies and slides

are the commonly used projected still visuals while photographs, diagrams, symbols, and posters are non-projected still visuals. Video-related technologies that incorporate stored motion pictures such as video on the World Wide Web, digital versatile disks (DVDs), and compact discs (CDs) are moving visuals commonly used in the classroom to dramatize concepts and help learners make necessary connections. Interactive hands-on experiences as in simulations, games, and role-plays use realia and models to mimic real world situations for active teaching and learning experiences. Literature abounds with evidence to support the benefits of incorporating media technology into instructional designs for effective online teaching (Palloff and Pratt, 2003; Alinier, 2007; Bonk and Zhang, 2008; DeYoung, 2009; Bristol and Zerwekh, 2011; Lewis and Ciak, 2011; Lynch-Sauer, et al., 2011; Siegrist, Garrett-Wright and Abel, 2011). The different media technologies engage learners with learning materials for efficient outcomes.

Students' engagement through the technology in an online community encompasses both formal and informal interactive learning experiences. In addition to fostering formal collaborative learning that meets different learning styles, online community environments build a positive learning culture and social presence that offer the learners much more than course knowledge acquisition (Bristol and Zerwekh, 2011; Mastrian, et al., 2011). Through these communities such as that obtained in the cyber café section of an online course design, learners socially and personally interact on non-course-related topics as they seek help on a variety of issues, support one another, and create long-lasting relationships. Generally, instructional design techniques with appropriate media technology align with the varied learning styles and characteristics of successful online learners. Such design techniques meet the needs of online learners through an online learning community and make up the effective facilitation methods for online teaching. The effective facilitation methods for online teaching undergird the principles of best practice for use in online nursing programs.

5. Principles of Best Practice for Use in an Online Nursing Program

Learning institutions design online nursing programs mainly for Registered Nurses (RNs) who need advanced nursing degrees for both personal and professional reasons. These nurses are generally adults with work and family responsibilities and a desire for the flexibility of distance learning mediated by technology (Cornelius and Glasgow, 2007; Magnussen, 2008; Legg, et al., 2009). The adult characteristic features of RNs result in practical, problem and goal-oriented, highly self-motivated, and directed learners with a variety of prior work and life experiences. In order to meet the needs of these adult learners, the nurse educator utilizes adult learning principles to ensure best teaching practices that maximize learning opportunities and outcomes. The best teaching practices are the teaching and learning strategies that enhance the quality of the online nursing program by meeting the needs of the instructors, learners, and the learning institution. High quality and flexible learning instruction, the guiding principle of best practice for use in an online nursing program, entails a radical shift in the traditional roles of the nursing program learning institution, the learners, and the instructors. The success of an online learning program largely depends on the values and goals of the learning institution, the instructor, and the students (O'Neil, Fisher and Newbold, 2004; Appana, 2008). Commitment on

the part of the learning institution, the faculty, and the students underlies a well-supported online nursing program and constitutes the principle of best practices for efficient outcomes.

6. The Learning Institution

Best practices for use in an online nursing program entail effective processes, practices, and infrastructure provided and maintained by the management in educational institution of the nursing program. According to O'Neil, Fisher and Newbold (2004), institutional standards, mission, philosophy, policies, and strategic plan should be dynamic and supportive of the online teaching and learning process. Such standards and policies should identify learners and instructors capable of succeeding in online programs and strive to meet their needs. Johnson (2008) noted that faculty members in an online nursing program are either teaching courses they developed themselves or by others. Institutional policies and standards govern the design, development, and implementation of such courses. Adherence to institutional policies increase instructor's course facilitation for best practice measures (Schulte, 2009). In addition to the policies, the degree of the success of the design, development, implementation, and evaluation of online instructions is contingent on the willingness and efforts of the learning institution to provide initial and ongoing technical support, equipment, and training to both faculty and students (Cornelius and Glasgow, 2007; Johnson, 2008; Magnussen, 2008; Zsohar and Smith, 2008; Fish and Wickersham, 2009). The training and support will enable both faculty and students to be comfortable with the required technology and unique demands of online educational system for optimal teaching and learning experiences.

While faculty needs technical support, training in online pedagogy, considerable workload, and compensation, students need adequate training in the required infrastructure and technical support in addition to all of the services available to the traditional face-to-face learners to ensure connectedness to the learning institution. Access to a user-friendly technology delivery system is an essential driver of best practice in online nursing program. Constantly changing hardware and software used in the online nursing program in an attempt to save costs may compromise quality of instruction. Keeping current with technological innovations and developing a culture that supports and encourages such innovations among faculty, staff, and students contribute to best online practice. Almala (2007) noted that such a technological culture entails effectively building and maintaining a strong e-learning infrastructure; establishing high standards for developing, designing, implementing, and evaluating courses; and strengthening faculty and learner support systems. Although adult learners have embraced technology, many of them are not very competent and continually struggle with completion of assignments and desire ongoing technical training (Darrington, 2008; Calvin and Freeburg, 2010). Around the clock live technical support is essential for both faculty and learners to alleviate the frustrations associated with technological inadequacies that may interfere with successful online learning experiences. Orr, Williams and Pennington (2009) contended that in addition to the technical support, institutional administrator's recognition, and adequate compensation of the time and skill required for online teaching contribute to online teaching excellence. Such recognition and compensation motivates faculty and drives their commitment to meet the needs of the online learner for best practice outcomes.

7. The Online Learner

RNs in online nursing programs are adults with adult learning needs and characteristics. According to Almala (2007), these learners are busy individuals seeking flexible and quality goal-oriented adult learner-centered learning experiences to enhance nursing skills, or earn academic and professional certification. In order to meet the needs of these learners, adult learning principles and theories as a framework for understanding how adults learn guide successful design, development, and implementation of the learning experiences. According to Palloff and Pratt (2003), using the principles of adult learning theory helps to meet the needs of the virtual student. The principles of adult learning theory are evident in the behaviorist, humanist, cognitivist, social cognitive, and constructivist adult learning orientations (Merriam, Caffarella and Baumgartner, 2007). Each of these orientations reiterates contrasting but related adult learning principles that apply to online learning. The behavioral and to a larger extent, the constructivist learning theory through the inherent collaborative active learning strategies that enable learners to personally construct knowledge based on past knowledge and experiences best aligns with online learning (O'Neil, Fisher and Newbold, 2004; Magnussen, 2008; Legg, et al., 2009). The essential tenets of constructivism theory that enable learners to construct meaning by interacting with one another, the faculty, and the learning materials, in addition to the adult learning principles, make up the best practices on the part of the learners for use in an online nursing program.

Adult learning principles, the cardinal goals of adult educational theories influence the teaching and learning processes of RNs in every teaching delivery format, but specifically to a greater extent in online learning experiences. The self-directed, internally motivated, goal-oriented, problem-based collaboration learning activities and a variety of prior experiences' principles of adult learning guide the online learning practices. The concepts in these adult learning principles shift construction of knowledge and control of learning to the learner. The self-regulation and monitoring abilities inherent in the self-direction principle account for the retention and success in online programs. Yu-Chang, et al. (2009) asserted that learners in web-based learning environments use planning with the calendar, monitoring progress with the online grade book, adjusting study routines, note-taking strategies, and seeking help when needed as varieties of self-regulated learning strategies for success. Supporting the self-monitoring and self-directed abilities of the learners, Appana (2008) noted that students' participation in and completion of online courses is entirely up to them. Consequently, the successful online student organizes learning time and schedule without external reminders, interacts, communicates, and keeps up with the learning requirements (O'Neil, Fisher and Newbold, 2004). Based on the self-directed principle of adult learning, best practices in online nursing program focus on the autonomy and ownership of learning responsibility of the learner. This principle underlies the instructor's roles and activities in the analysis for course sequence and content in the curriculum, the design, development, implementation, and evaluation of online course programs.

8. The Instructor

Adult learning principles guide the behaviors of the instructor in online nursing programs. According to Johnson (2008), adult learning principles integrated in web-based instruction have resulted in a paradigm shift in nursing educators' philosophy of teaching and roles as instructors. The instructors, comfortable with technology and knowledgeable of the pedagogy of online teaching and learning facilitate learner's self-directed construction of knowledge. The pedagogy of online teaching and learning entails considerable time-intensive activities (Gallien and Oomen-Early, 2008; Johnson, 2008; Magnussen, 2008; Zsohar and Smith, 2008). Gallien and Oomen-Early (2008) noted that the issue of time commitment in terms of workload might influence learning outcomes. Self-assessment of technological skills, teaching style, and online pedagogical ability identifies instructors for the design, development, implementation, and evaluation of learning experiences for best online teaching practice.

Designing and developing nursing courses for best online teaching practice demands the expert content knowledge of the instructors in collaboration with the web-design team. Dunlap, Sobel and Sands (2007) contended that successful online programs entail course design strategies and contents that actively and intellectually engage learners; promote critical reflection, and positive educational experiences. Such positive educational experiences integrate problem-centered learning opportunities that enable learners to engage in meaningful interactions with the learning content. Similarly, Hutchings, et al. (2007) asserted that key learning design principles for active and constructive learning include variety, action, application, interaction, feedback, scaffolding, and evaluation. These course design principles enable appropriate design and development of web-based learner-centered courses that facilitate best online teaching practices and student learning. Familiarity with the electronic features of the LMS enables the design and development of courses in such a logical sequence that facilitates easy navigation and access to course materials and requirements. According to Li and Irby (2008), attending online education workshops, conducting literature reviews on best practices for online education practices, and networking with other instructors experienced in online course design, development, and implementation enhances the effectiveness of novice and experienced online instructors. Best practice effective course design and development based on online techniques recognize the nature of the learners, optimizes learning, and facilitates implementation of the course materials.

Effective implementation of the designed and developed online course depends on the instructor's forefront clearly written communication of faculty and learner's expectations that substantiates the course syllabus. Specific, respectful instructions on faculty and learner expectations regarding emails; general and private questions; grading rubrics for discussions, examinations, and assignments; discussion board and cyber cafe expectations; institutional policies on cheating and plagiarism; and requirements and due dates for assignments and discussion postings guide learners' activities and expectations for optimum learning outcomes (Gallien and Oomen-Early, 2008; Zsohar and Smith, 2008; Vitale, 2010). In this way, the instructor functions as a facilitator and guide in the collaborative learning environment as students direct their own learning. Such instructor roles promote learners' active involvement and ownership of learning responsibilities for efficient outcomes. Literature reveals that clear

communications that facilitate the learner-content, learner-instructor, and learner-learner interactions are significant for successful online learning experiences (Palloff and Pratt, 2003; O'Neil, Fisher and Newbold, 2004; Gallien and Oomen-Early, 2008; Li and Irby, 2008; Zsohar and Smith, 2008; Ali, 2009, Fish and Wickersham, 2009, Lassitter, 2009). Lassitter (2009) asserted that clear written communication through which the instructor offers guidance, nurturing, and mentoring is the essence of successful online instruction. The personal and collective interactions and communications between and among faculty and students in the different sections of the LMS prevent feelings of isolation, connect learners to the learning institution, and make up effective principles of best online teaching practice. Gallien and Oomen-Early (2008) affirmed that the interaction and communication promotes a sense of community, social presence, and connectedness. The sense of community provided by the various interaction and communication strategies mediated by the instructor predicts student satisfaction, retention, and learning in an online nursing program.

At the end of the learning experiences, through the learning institutions' evaluation policies and strategies, both learners and instructors provide evaluation data used to strengthen the online learning experiences for continual best practice. Generally, using effective online pedagogy and technology in combination with the tenets of the adult learning principles and constructivist learning theory through clearly written communication of faculty and learners' expectations make up the principles of best practice for use in an online nursing program.

9. Conclusion

Technological innovations mediate lives and learning in the 21st century resulting in optimal instructional designs that facilitate teaching and learning processes for efficient outcomes. Such instructional designs integrate the multi-sensory strategies of the World Wide Web to engage learners with the learning experiences. The resulting instructional design formats range from web-support to hybrid, and web-based (online) delivery strategies that appeal to student needs and styles of learning. The goal is educational learner-centered opportunities that enable them to construct knowledge through collaborative, engaging, and interactive learning experiences for efficient outcomes.

The web-based or online modality is an attractive trend of 21st century learners. The demand for a flexible educational opportunity for the working adults led to 'anytime, anywhere' distance learning based on technology-mediated resources. Review of literature on effective facilitation methods of online teaching revealed instructional design and delivery strategies that maximize online learning opportunities to meet the needs of online learners. Such instructional design entails building online community and uses different media technology to address the needs, expectations, and learning styles of online learners.

On the other hand, online teaching and learning has challenges for the management of the educational institution, instructors, and learners. Technical support, cost, time commitment, communication and organizational skills, increased workload, technologically savvy, feelings of isolation, and difficulty in ensuring academic integrity constitute challenges that may affect online teaching and learning.

The instructional designs of the online learning modality in nursing programs mainly address the needs of RNs who desire advanced degrees for personal or professional reasons. Integrating adult learning principles in the design of online instructions for RNs through the facilitative interactive activities of the learners themselves, the learning institution, and the instructors ensures principles of best teaching practices that maximize learning opportunities and efficient outcomes for RNs.

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