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The Competencies, Preparations, and Challenging (New) Roles of Online Instructors

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This paper is a discussion about the basic preparatory steps and necessary competencies for making the transition from a traditional face-to-face to a full online teaching and learning, and it is intended to highlight the required pedagogical roles of an online instructor using an interactive computer-enhanced asynchronous information communication technology.

Keywords: instructional competencies, new roles, online teaching, media technology, distance education, facilitator

Introduction

Education, whether it is the traditional or distance/online academics, is a more structured and systematic process of sharing, transmitting, and communicating valuable information, skills, and knowledge within an institutional framework and based on a given instructional curriculum. Within this process and among the litany of other related activities that go on in any educational system, are both teaching (by the educators with the learning support service personnel) and learning (by the students). With traditional education, there is the usual on-site and face-to-face synchronous interaction and information communication between the students, their teachers, and the course content. In contrast, distance education involves the delivery of teaching materials with the students learning that takes place through the mediation or enhancement of media technology. In most cases, students and teachers do not meet in-person (Conrad, 2007; Holmberg, 2005). Technology allows students, even though they may be geographically separated, to interact and engage in a meaningful real-time or asynchronous information communication in the virtual world through the use of computer technology.

Whether it is in the traditional or online education, one thing seems to be clear, and that is, learning takes place which, as a necessary human process, involves the active engagement with experience when people want to make sense of the world and which also in the end brings about the increase in skills, knowledge, understanding values, and the capacity to reflect (Karaliotas, 1998). Learning, as a necessary intellectual endeavor, is the process through which human beings participate rigorously in the most productive activity of constructing knowledge by acquiring, processing, assimilating, and integrating certain value-specific information and creative ideas based on structured and determined constructive socio-cultural interaction (Karaliotas, 1998; Kolb, 1984).

The focus of this paper is distance education, the competencies, and the challenging roles for an online instructor using computer-mediated or enhanced technology. Many academic institutions and non-academic organizations are providing educational opportunities and in-service training to their students and employees

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based on certain personal/professional needs, career goals, institutional desires, and professional development of the prevailing global market conditions for high productivity and competitiveness. For some of these reasons, there is the effort to design and offer online courses as part of distance education programs to students and by their tutors (as knowledge-facilitators and e-moderators), and usually these two major players or arties would remain physically and geographically separated from each other or at a distance while teaching and learning are ongoing or in progress. The teacher and the students often meet and interact with the course content and on an interpersonal level in the virtual world by effectively and efficiently using the computer as a mediating technology. Computer-mediated or assisted distance education is a type of education that relies on the use of computer as an instructional technology for the organization, facilitation, and delivery of the course materials through asynchronous information communication with a wide range of available choices: printed materials, interactive video and voice options, tele-conferencing, and data processing and storage capabilities.

Computer-mediated and Internet-based technology for information processing and communication has radically revolutionized and transformed teaching and learning (Jorgensen, 2002; Murphy & Laferriere, 2007) in terms of what is being taught in most schools, and how students can learn with limitless possibilities and advantages thereof. This obvious transformation has resulted in a new critical pedagogy (Morrison, 2007) that is based on the constructivist epistemology and has made an online learning via distance education a rewarding human enterprise. “Constructivist epistemology”, as an educational philosophy with its practical implications for distance education, is that human knowledge is a shared or socially constructed reality, and that learners have the necessary capacity to participate meaningfully in the structuring, planning, and execution of their own education (as autonomous individuals with diverse personal or professional backgrounds). It is a belief that active human beings construct their own relative and useful knowledge based on shared needs, desires, and experiences, and this explains why distance education creates a so-called “paradigm shift” (Parker, 2004). Gabriel (2007) remarked that “knowledge is subjective” and, based on that principle, argued that:

> Constructivists believe that learners must construct their own understanding of phenomena through absorbing information, making connections with previously existing knowledge, and working with new knowledge-instructors who teaching from this perspective aim to support their students as they develop ever-more complex comprehension of concepts. Instructors use the experiences and interpretations that their students bring to learning situation as starting points for building understanding-tend to look for student understanding to reason using new knowledge constructed through active learning. (pp. 177-178)

This shift was evident in “the transition from the Industrial Age to the Age of Information” marked by “a re-conceptualized role” for faculty-from deliverers of content to mentors and facilitators of learning. The technological revolution affected education and transformed it for the better. In the Digital Age, there has been a move from the traditional or teacher-based education to a more student-centered approach considered to be more engaging, flexible, autonomous, interactive, and collaborative learning through faculty mediation, moderation, and facilitation (Bates, 2007; Beaudoin, 1990; Berge, 1995a, 1995b, 1996, 1998a, 1998b, 2006; Brown, 1997; Conrad, 2007; Gabriel, 2007; Mason, 1991; Moore, 1989; Morrison, 2007; Pitt & Clark, 2006; Peters, 1998, 2006; Rourke, Anderson, Garrison & Archer, 2001; Shih & Swan, 2005; Wozniak, 2007; Wolcott, 1995; Yang & Cornelius, 2005).

Murphy and Leferriere (2007) maintained that the traditional on-site education has given way to an online or e-learning which is computer-enhanced and technology-based, and it involves moving away from a form of communication that is synchronous, real-time, and face-to-face, to one that is asynchronous, in delayed time,

and text-based time any-place learning. According to them, some of the advantages and demerits of asynchronous communication would include increased opportunities for reflection, equality of participation, easy archiving of communications, loss of non-verbal clues, possible decrease in social presence, lack of interaction, lack of spontaneity and immediacy in communications, and so on. Jorgensen (2002) highlighted positive impact of this transformation to schools, students, teachers, and the world-community at large, for as the world has been ushered into an information age in which technology plays a more active role and societal institutions have been affected on all levels. The educational institutions, in particular, have been impacted as educators, administrators, and policy-makers have sought to make the most effective use of the tools of technology; and students also have to negotiate their school responsibilities with those of jobs and families in ways that justifies universities' transitioning to the asynchronous method of delivery (Jorgensen, 2002, p. 3).

The challenging (new) role of the online instructor (as an e-moderator and facilitator of knowledge) has to do with having minimum social and teaching presence as "a ghost in the wings". The notion of being a "ghost in the wings", as Wozniak (2007) explained that, is the online instructor in order to be effective and productive as an e-moderator and a knowledge-facilitator that has to "intervene in a minimal way" and "adopt the invisible style" (p. 214). This can be done when instructors take the time to master the virtual environment, clearly defined students' responsibilities and expectations in this interactive learning experience, and making sure that "Students were given clear guidance that it was their responsibility to monitor their own contributions and participation" (Wozniak, 2007, p. 214). All these would then enable the teacher to maintain that level of minimum teaching-social presence that frees him/her and makes it possible for prompt and necessary feedback. The attempt in this paper is to provide an interpretive analysis of distance education, particularly the online teaching and learning, which: (1) emphases on the preparatory steps and competencies needed for the transition from a face-to-face delivery mode to the cyberspace or virtual learning environment; and (2) focuses on a personal reflection on the challenging roles of an online instructor in the age of computer-mediated asynchronous information communication technology that is based on the constructivist epistemology.

The word "new" is used in this context to show how different online learning, particularly the type which is computer-mediated and asynchronous communication, is from the regular or traditional face-to-face learning. One unique aspect of this type of learning is the central role of communication medium due to the geographical distance and physical separation between the participants: students and their instructors (Moore, 1993). The paper will highlight and articulate the nature of online instruction and its challenges as part of distance education with a close examination of how computer-enhanced technology has changed education. Technology has helped in bringing about a remarkable change in the way people do things or live their lives. Bates and Poole (2003) articulated the importance of media technology in modern society when they argued that "Internet has become a major influence on a wide range of activities. It is used for communications… banking, hotel and travel reservations, entertainment, news, and a host of other application" (p. 8). Technology has in many ways become "an essential feature of work, leisure, and study for many people, and its influence is likely to grow as more and more people are able to access the technology on a global basis" (p. 8). These have resulted in an unprecedented transformational shift that has affected educational modalities and practices which have contributed in new ways by which teachers teach and students learn via the Internet. Bates and Poole (2003) also called this phenomenon or paradigm "the technological imperative" and argued that there are enormous social advantages and "important educational benefits in using technology for teaching" (p. 10). Technology has impacted higher education leading to the improvement in the quality of human lives, and implicit in this is

the argument that online education is remarkably a "significant educational innovation" with its own "legitimate pedagogical designs" for good results.

In the article, the author engaged in a critical-textual study and interpretive content analysis of a selected reading that focuses on distance education and online course design or development, in relation to the essential competencies and the new roles of the online instructor. The role of the online instructor has drastically changed since, the instructor, in order to achieve or maintain minimum social presence in the virtual learning environment, has to act as a "ghost in the wings" (Wozniak, 2007). This project is designed to give the student an opportunity to chronicle one's experience and demonstrate what has been learned or knowledge gained by virtue of the courses taken. Since the author is interested in effective online teaching and learning (as an e-moderator and e-learning facilitator). The paper attempts to further his interest and demonstrates the level of competence attained as a future online professional. The paper makes the argument that teaching has changed and has become less faculty-focused, more active, and student-oriented in a manner that makes learning even more flexible, autonomous, interactive, collaborative, and the responsibility of the student/learner. Online teaching, although not that new, can be different from the traditional delivery mode and remains interestingly challenging to those instructors in some institutions. Developing and teaching online courses may be difficult and challenging, because the faculty members lack adequate prerequisite knowledge, the technical or managerial experience or are simply without sufficient preparatory training and professional development skills as well as the right perspective.

To develop and teach online courses, instructors need adequate preparations and personal effort, change of attitudes and perspectives, a keen interest in the use of educational or instructional technology, time for planning and management skills, and the ability to serve as or play the "role of the e-moderator" which has to do with being a "ghost in the wings" (Wozniak, 2007, p. 214). And while the instructor, in order to maintain this kind of minimal social presence as a conference moderator, students would be required to make certain changes to develop skills which, according to Bates and Poole (2003), are necessary "for this type of learning to take place" (p. 16).

Literature Review

There is an ample body of literature in the field of distance education and online learning that provides instructions about the basic preparatory steps, faculty competencies, and "the challenging new roles" of an online instructor. This phrase, "the challenging new roles" of the online instructor, is used deliberately to emphasis the dramatic change in the functions and responsibilities of any competent faculty member in the online and virtual learning environment as different from those teachers in the traditional setting. The literature contains a plethora of rich, well-written, provocative materials and arguments within the field of distance education with respect to the adoption and use of media technologies as effective teaching tools or unique instructional technologies, and in particular computer-mediated information communication. In this regard, Berge (1995a; 1995b) maintained that in facilitating computer conferencing, the parties (students and teachers) are challenged by new roles, functions, and tasks they need to perform. And part of the instructors' online responsibility is to come-up with clearly stated learning goals and course objectives, and decide on the instructional methods with which to enable students achieve the desired ends. With technological changes and transformation, some articles reflect the need for a move or transition from the traditional face-to-face delivery mode to either a blended which is a dual mode of delivery or the online which is the electronic learning (also

"e-learning").

Bullen and Janes (2007) have pulled together relevant articles that are critical to the transition from the traditional to the more modern online or electronic learning, and they focused on some of the issues, strategies, and problems for making this kind of transition to e-learning. The world of today, they would argue, seems to be "rapidly changing" and the change is technology-driven with more demand for education, skills, and professional training as a result of the nature of the contemporary knowledge-based and competitive global market economy. This new global market economy is technology-driven and both information-intensive and knowledge-based. It requires people to be constantly searching for and acquiring sources of new information in order to remain highly competitive and productive. As academic institutions move toward e-learning, as an urgent answer to increase in students' population to provide flexible and accessible learning that is more cost-effective, they at the same time are confronted with certain strategic, technological, pedagogical, and organizational issues. Bates and Poole (2003) have a remarkable book on effective teaching with technology in higher education, in which they tried to demonstrate the effectiveness of teaching using certain media technologies as tools that can promote better instructions and enhance students' overall learning. They did not prescribe media technologies as the kind of cure-all solutions to both teaching and learning, but as a powerful tool which if used properly could lead to increased access and contribute to the improvement of the quality of academic products. The book's central theme is how to integrate technology best and make teaching more effective in higher education as they provided needed guidance for those who may develop and teach online courses using assorted media technologies with the kinds of supports that online instructors may need in order to be successful and effective.

Berge (1996) discussed the types of interactions (between the student and the course content, and the students and others which he would describe as "interpersonal interaction") and listed the four most challenging functions or new roles of an online instruction using the computer/Internet technology as the medium. The categories are: pedagogical/intellectual, social/collaborative/interactive, managerial/administrative, and technical expertise to provide overall operational guidance. These categories present the areas in which the online instructor, in order to be effective and successful in teaching distance education courses using computer/Internet technology, must be prepared to develop the basic competencies. Without such competencies, the move from face-to-face toward online teaching would be only a dream or may end-up as a fiasco, for lack of adequate preparation.

The Preparatory Steps and Competencies

About the basic preparatory steps and competencies necessary for the online instructors, some of the texts and materials studied and reviewed include: Berge (1995a; 1995b; 2006), Collins (1996), Conrad (2004), Mason (1991), Moore (1989; 1993), Naidu (2001), Peters (2006; 1998), Pitt and Clark (2006), Stacey (1999), Taylor and Maor (2000), Wolcott (1995), Wozniak (2007), and Yang and Cornelius (2005). They provide the elements and criteria for effective online courses and learning.

In the area of interactive computer-mediated information communication and Internet technology in which the role of an online instructor is regarded as that of a knowledge-facilitator and an e-moderator, Berge has played a leading and pioneering role with several research studies and invigorating publications that dated over 15 years (2006, 2000, 1998, 1997, 1996, 1995, 1994, and 1992). Teaching an online course using the computer and through the Internet is a structured, systematic, and well-coordinated process of interactive communication

and an interesting learning experience. Berge (1995a; 1995b) said that a critical component of any use of computer mediated communication when facilitating online instruction is access to a high level of computing power and a reliable telecommunication infrastructure. He went on to add that, for the instructor to be effective, there is the need for careful planning, detailed preparations, and the mastery of the basic teaching competencies in light of using instructional technology. The use of technology is secondary to well-designed learning goals and objectives and this relates to "the purposefulness of the designers and developers in provoking certain intelligent responses to the learning materials, context, and environment" (Berge, 1995a; 1995b, p. 1). Beaudoin (2005) agreed with the secondary role of technology with an emphasis on the role of online instructors and said that "Technology itself does not improve teaching and learning, though it can and does, at least in the hands of skilled distance educators, facilitate the process" (p. 43). Within the process is the element of interaction and Berge considered the two types using the computer conferencing technology, and these are: the interaction with the course content and the more interpersonal interaction with other people as faculty and students (Berge, 1995a; 1995b). With the role of the online instructor as that of a facilitator and an e-moderator, it becomes obvious that such an instructor would be charged with the primary "responsibility of keeping discussions on track, contributing special knowledge and insights, weaving together various discussion threads and course components, and maintaining group harmony" (Berge, 1995a; 1995b, p. 2).

Modern society is now the Age of Information and technology with rapid or spontaneous communication as a result of technological revolution and information transformation. Peters (2006) realized the nature of this revolution and transformation when he remarked how these changes have affected and shaped education in terms of how teachers teach and students learn. He noted that there was a certain kind of "structural difference between campus-based and distance education… There are many faculty members who believe and are convinced that the only difference is merely 'distance' and the importance of technical media needed to bridge the gap between teacher and taught" (Peters, 2006, p. 38). Their fundamental mistake has to do with their inadequate pedagogical attitude and poverty of understanding as well as preparation. The kind of distance education that people have and enjoy today is unique because of its close affinity with technology and helps to explain why it is completely different from the traditional, on-site, or campus-based education. Peters (1998) argued that the kind of distance education of today, that is information-based and technology-driven, has "an entirely different approach with different students, objectives, methods, media, strategies and above all different goals in educational policy" (p. 38). Because online course using computer-enhanced mediation requires a new kind of teaching and learning approach, there is the urgent need for the new online instructors to take the basic preparatory steps before moving from the campus-based to the virtual learning environment.

In the online virtual world, the teacher and the students do not meet and see each other, but are or remain geographically separated and miles away, yet teaching and learning would be taking place either synchronously or asynchronously. There is no physical contact or consummation, because the "prevalent forms of teaching and learning are not speaking and listening in face-to-face situations but presenting printed teaching material and using it in order to acquire knowledge" (Peters, 2006, p. 39). Instead of great emphasis on the teacher giving voice lectures and students listening, taking notes, and regurgitating the lecture notes to pass given examination, both students and their teachers depend on reading, written responses, and interactive information communication by the use of the computer and Internet technologies. And because of the nature of this new kind of educational transaction, without regard to the real geographical distance that separates the teacher from students, Peters (2006) called it "a revolution which is aggregated by the emergence of the digital information

and communication media", and which in no small measure "means that we have to deal with quite another form of education" (p. 39). This type of new education, based on the use of computer and Internet technologies, is such that if it has to succeed and be effective, which Peters (2006) suggested, "must be planned, designed, constructed, tested, and evaluated with full awareness of the pedagogical goals and means" (p. 39). And there is no doubt that these are part of the challenges and cost that go hand-in-hand with it, and also may cause some personal "uneasiness and a degree of insecurity in teachers and learners alike" (Peters, 2006).

Online learning has revolutionized the way people do things with its long history, and has radically changed the way teachers teach and students learn. The use of technology is critical to this online instruction and interaction (content and/or interpersonal), and it is important that both the students and their teacher know how to use technology, be able to operate the system, and navigate their way within the virtual environment in order for the learning experience to be worth the effort. There may be situations when some students who registered for the course may not be very proficient with the use of technology, and they may have to depend on the wisdom and technical expertise of the online instructor to guide them through and provide them with, at times, real technical assistance and support for them to be successful. Some students may develop some kind of "techno-phobia" prior to taking the course and which they must, for certain personal and/or professional reasons, take for their occupational mobility, career advancement or personal satisfaction, and in which case, they need moral support and social presence of the online instructor to be able to function and overcome their phobia or impediment. In these situations, the online tutor would need to exhibit some level of competence, self-confidence, and professionalism in teaching the course and handling the students. The instructor would also display that he/she is fully in control, able to deal with any issues or problems, and be competent in directing and leading the course. The course will be a disaster if or when the instructor fails to or could not provide students with adequate answers concerning the course that are epistemological or pedagogical, social or collaborative, administrative or managerial, and technical or mechanical in nature, orientation, and complexity. As an online teacher who is worth his or her salt, students would expect their instructor to be a "jack of all trade and master of all", and this would be possible when such an individual has taken and fulfilled the basic preparatory steps before making the transition from a face-to-face to an online teaching. Competence means being able and well-qualified, properly trained, as well as having the required preparation and the capacity to do or perform a particular function or an assigned task with the right professional insight and judgment to excel. Also, it is about being knowledgeable about the subject-matter, having all that it would take to organize, coordinate, and manage the virtual learning environment comfortably, and having the vision and inherent ability to direct and control the behavior of students from different socio-economic backgrounds by helping them through constructive feedbacks. Competence requires the online instructor to take the time to do careful planning of the course, need-based assessment, articulate in clear language course goals and learning objectives, and being able to decide on the most effective teaching strategies to resort to be successful and maximize the effects of student/learner-centered, autonomous, and collaborative learning experience.

Without the necessary preparations and mastery of the required competencies, an online instructor may be worse than the students and ineffective in delivering the course materials, and students will most certainly not be in a position to get the desired "quality online instruction" (Yang & Cornelius, 2005). Yang and Cornelius (2005) set out in the paper to ask a series of serious questions about offering online courses by instructors who, for some reasons, failed to make the right or adequate "preparations" with which to ensure the desired students' learning outcomes. They examined the inherent online challenges, suggested some strategies for the effective

design and delivery of online instructions, and came-up with certain recommendations to prepare instructors to provide quality online instructions with the necessary support services. Online instructors need to become leaders in the field in order to be better and in an uncompromising position to lead their students, and provide them with quality and effective online instruction. That is possible when they have taken the time to understand their new/challenging role and be more willing to fulfill that role, have the right frame of mind and positive attitude toward distance education/online learning, and believe strongly in its merits and advantages. The well-prepared and competent online instructors are or can be compared to/with the able or effective leaders who have the right vision, capabilities, and professional training and can make the difference in the lives of students whom they guide, direct, control, and are entrusted to their care. But online instructors who lack such skills and competencies can be compared with the biblical blind leaders leading the blind and all will fall into the pit.

So, what are the basic and necessary preparatory steps? The first and most important step in this direction is for the potential online instructor to sort oneself out in terms of attitudes, personal interests, convictions, pedagogy, and perceptions. All these values need to be carefully evaluated and should be in sync with the goal and philosophy of distance education and online learning, as Conrad (2004) illustrated in her study that adequate preparation is of utmost importance in this regard. In the study, she was privileged to meet with and interviewed instructors who were engaged in online teaching for the first time, in a graduate program at a Canadian university. All instructors had some post-secondary face-to-face teaching experience. In-depth interviews with the instructors showed that they had very little knowledge of the new medium they were entering and relied heavily on their face-to-face experiences and their own pedagogy (Conrad, 2004, p. 1).

What her study dramatized was that, no matter the instructors' years of service and wealth of teaching experience in the traditional setting or professional expertise, to be effective and successful in an online teaching would require adequate training, proper preparations, and mastery of basic competencies (Kearsley, 2000; Rosenberg, 2001). To ensure competencies, online instructors need to be certified and trained. Part of the rigorous training exercise would be to expose and introduce the new or potential online instructors to the diverse, complex, challenging, and demanding field of distance education and to make it possible for them to learn and if possible also master the basic competencies which are particular to online teaching. And training is in addition to a complete change of attitudes or perceptions for a new, appropriate online pedagogy. Otherwise, the new online instructors will not be effective and successful, or at best will be limited to function in the online environment due to their over-emphasis "largely on their roles as deliverers of content" and so "revealed very little awareness of issues of collaborative learning, of learners' social presence, or of the role community in online learning environments" (Conrad, 2004).

Well-trained and competent online instructors should be aware of what is required in teaching online courses that, to be effective, they need to provide students enough time and space to interact and collaborate with the other students, be autonomous and reflective in their deliberations, participate actively in class conference discussions with the teacher's minimal social presence, and the course information and materials should be stored or archived for future references and subsequent close-textual study. In online course, it is the sole responsibility of the course instructors to set the basic rules of engagement, interaction and collaboration taking into due consideration and respecting the differences in the diverse students' body without deliberately trying to offend anyone. At the UMUC (University of Maryland University College), the Office of Faculty Affairs affiliated with the Center for Teaching and Learning ensures that new faculty members are provided with the initial and critically needed training based on the "Best Practices for Online Teaching". The purpose of

this effort is to help the new online instructors "to identify processes for effective teaching and learning online". This training course or program provides critical information and guiding principles to ensure and guarantee instructors competency and proficiency with online instructions in these areas:

(1) Best practices related to the design of course;

(2) Things to consider during and after the course;

(3) Interaction;

(4) Faculty satisfaction;

(5)The art of feedback;

(6) Assignments and activities for online courses;

(7) Working with small groups.

Most academic instructions offering online courses, like what is done at the UMUC's Graduate School of Management and Technology, are that before new online instructors can begin to teach, they are made to clearly understand their professional responsibilities and teaching expectations in joining the institution in the effort to guarantee "providing the highest-quality education to its students". The faculty members who do not have such certification trainings, or were never provided with adequate teaching resources, or were not prepared to teach online courses and therefore lack the right frame of mind (attitudes and perceptions) will probably not be effective or allowed to teach. They short-change themselves and narrowly limit themselves to the old paradigm of instructor control, procedures, didactic teaching of teacher-centeredness and teacher as knowledge dispenser, instead of and as opposed to the new paradigm shift based on learners' choices and flexibility, active, and student-centered learning which is both collaborative and empowering, and a changing new and challenging role of the instructor as a facilitator and an e-moderator. New online instructors have to be ready to change their attitudes, perceptions and approach the use of technology with its impacts on education and be honest, open-mind, and optimistic. Rosenberg (2001) highlighted his well-received "Four C's for an online learning success: culture, champions, communication, and change" (pp. 179-210). Both culture and change are universally important, because everything else seems to rotate around them in terms of cultivating the right culture and attitude in both the faculty members and the administrators, having the vision and ability to move forward and change, and creating the right conditions as the sine qua non. Thus, "too often companies invest in new technology only to find that the existing culture will not support it". One way to go beyond the lip service mentality is for the institution to create the new culture that transcends prior negative or pessimistic attitudes, one that takes time to provide the faculty with the necessary in-service training or an ongoing professional development with focus on distance education and online learning, to prepare the faculty and make them competent and proficient in integrating technology into their classrooms.

There are different ways or approaches for online instructors to demonstrate their competencies or the lack of such training, skills, the right attitudes, and in-depth knowledge of the subject-matter. Smith (2005) listed 51 competencies for an online instruction, and argued that effective distance/online education has to be judged and evaluated in terms of quality learning which, for him, greatly depends on learner-centered academic programs and qualified, competent online instructors. The competencies that a qualified and competent online instructor, which he maintained, must have before, during, and after the course. Smith (2005), in his famous 51 competencies for online instruction, has argued that "The effectiveness of distance learning must be measured in results-quality learning… Teaching online requires specific skills sets (competencies)… and describes 51 competencies needed by online instructors" (p. 1). These 51 competencies are contained in the four categories

that Berge (1996) listed and discussed. Berge (1998a; 1998b) talked about the need for a new kind of culture with which to help move some teachers away from anachronistic and anti-progressive sentiments of some of them. They are the kinds of people who "often seem to take the attitude of 'prove' that technology will work for me, in my classroom, and I may give it a try (if I have time)".

The (New) Challenging Roles of Effective E-Moderators

Technology has changed human condition and continues to improve the quality of lives in so many rewarding ways. Davenport (1997) described this moment in human evolution and development as the "new information age". Jones (1997) argued succinctly that technology is a transforming force "in a process that may be unique in the history of mankind, we have created a technological capability that is transforming the global societies it touches" (p. xvii). This is so true, and one aspect of this transformative change is in the field of education. Education has always been the process through which information is gathered, communicated and knowledge shared between students and their professors. In the past, in the pre-distance education era or some thousands of years ago, Bates (2005) noted that from Moses and Socrates onwards, the teacher was the primary source of both information and knowledge which were shared, transmitted, and communicated by direct contact and in close proximity with the few student/learners. This type of human activity went on until the invention of the printing press (in the 14th century). Even with industrial revolution, teachers continued to remain relevant and at the center of every educational endeavor. Bates (2005) said that these progressive developments, although impressive and remarkable, yet could not alter "the basic organization of education" or had any "impact on the technology of education" (p. 42). All these activities continued with the introduction of radio, postal services, telephone, and so on, but teachers remained at the center of education. It was not until the 1980s that there were rapid developments and use of media technologies for instructional purposes that there was a radical or fundamental paradigm shift in both teaching and learning, and this shift was expressed in terms of a student/learner-centered approach based on the constructivist epistemology. With the use of media technologies, teachers could teach at anytime, anywhere to students and also students were equally able to study, learn, and actively interact with the course contents and engage in interpersonal relationships in manners that enhance and enrich their learning experience.

Today, in the 21st century, there is no doubt that distance education (as an alternative to traditional education) which is technology-driven has continued to gain grounds and is spreading like wild fire at many institutions of higher learning and in many communities. This has been the case, because of the force of information communication technology which Guri-Rosenblit (2004) remarked is transforming the ways we learn, teach, generate knowledge, and conduct research, and academics are expected to adjust to the future changes of their traditional roles. The interesting thing about the new paradigm shift is that "the new teaching and learning environments require the academic staff in both conventional and distance teach universities to assume new responsibilities and to develop a range of new skills and talents" (Guri-Rosenblit, 2004, p. 63). Beaudoin (2005) acknowledged that in the digitalized global community, institutions of higher learning and the role of faculty members have changed and will continue to change as both the stakeholders and shareholders, teachers and students "adapt to new ways of teaching and learning across time and space" (p. 31).

The change is a transition from the traditional face-to-face to the cyberspace or virtual learning environment, a change that also transformed or changed the way teachers would teach in the online environment. For most of the online teachers to be successful and efficient in online instructions, as well as

effective e-moderators, which according to Beaudoin (2005) is somewhat new, the faculty members need to be fully prepared and continuously trained "for their new roles as distance educators" (p. 33). The faculty members who were not adequately trained or exposed must get the full benefit of adequate training, according to Beaudoin (2005), without which they would remain "susceptible to misuse of platform features at either end of the use of continuum" (p. 47). Online education and instruction, unlike the traditional face-to-face synchronous education, tend to be slightly different for two reasons. The first is that it is uniquely student/learner-centered and based on the constructivist epistemology that allows the learner to become autonomous, active, and responsible for his or her learning, although there are many instructors in the face-to-face mode who also use the student-centered approach. Its uniqueness is that of empowering the learner and taking into due consideration his or her life experiences, needs, and desires. The second is that it is technology-driven. Both have helped in transforming the role of the faculty with the use and adoption of educational or instructional technologies as important resource in distance education.

Technology is an important asset in the business of distance education, for it helps conquer geographical distance and physical separation. Thus, Beaudoin (2005) would remark that:

> The teacher is increasingly an intermediary between students and available resources. Teachers must know something about the potential of technology to facilitate learning and to enhance their own effectiveness. They must come to recognize how technological application can create greater access to education by overcoming time and distance problems, and how it provides for diverse learning needs because it has the capacity to deliver material in many different formats. (p. 52)

With the move or transition from the traditional face-to-face to the cyberspace or virtual learning environment through the mediation of computer/Internet technologies, the online instructor's roles have become those of a mediator, facilitator, and an e-moderator as distance educators. The question here is what is meant by "online mediator, facilitator, and moderator?". Beaudoin (2005) phrased the question succinctly, with reference to the new and challenging roles of online instructors, as follows: "Just what do faculty teaching at a distance do?" (pp. 55-56). The instructor must first understand the nature and scope of his or her new online responsibilities which, among other functions, would include creating the conditions for active, collaborative, autonomous and student/learner-centered learning environment. For Beaudoin, one thing should be obvious that the faculty engage the students in "a dialogue rather than a directive" and, if the instructor knows what he or she is doing, has to create, adopt, and have an "effective instructional materials" (p. 56) that are necessary to guide and assist the students/learners in their flexible, almost autonomous learning experience and quest for information and knowledge. The use of "effective teaching materials", such as a well-tailored course syllabus with clearly stated performance criteria that define what constitutes meaningful participation, etc., would help the teacher maximize his or her time and effort doing other important things (like providing prompt and responsive feedbacks). It does help the online instructor to minimize his or her social presence to avoid interrupting students' active learning, and this is what Wozniak (2007) would describe as the "ghost in the wings" (p. 214). The notion of an online instructor being or serving as a kind of "ghost in the wings" metaphor is used to refer to the situation where the instructor operates in the online virtual environment with a limited social presence and without interruption of students' study: discussions, collaboration, and interactive. To be effective and successful, Wozniak (2007) suggested the instructor carefully plan the instructions to avoid unnecessary monitoring, articulate what is required and stipulate students' responsibilities, create the condition for productive student-student and/or student-course content interaction. In the online world, students are

provided a clear instruction and guide on how to police themselves with the "responsibility to monitor their own contributions and participation" (Wozniak, 2007, p. 214). This necessary learning activity is a form of empowering the students, by the online instructor as an e-moderator and facilitator, by encouraging effective interactive communication and participation.

What happens with online learning is that after the course has been designed and developed, by the instructor or team, and everything has been ready and set, what is left and needs to be done is for the designated instructor to take up the responsibility and teach it. Offering and teaching a distance or an online course requires essentially two things for the instructor: (1) to deliver or present the actual course content to students; and (2) be able to competently or professionally manage the learning environment (students, content, and other technical or technological components). Berge (1995a; 1995b) described the role of the online instructor and e-moderator as that of a "facilitator" whose primary duty is modeling effective teaching and delivering educational materials to students via the Internet can be seen to consist of these four: "pedagogical, social, managerial, and technical" (p. 2). This seems to be the standard for assessing and evaluating the new and different roles of an online instructor, e-moderator and facilitator who, for better or worse, is charged with pedagogical considerations or what Holmberg (2005) called "the presentation of subject-matter", which he explained thus:

> As an educational endeavor, it must engage students in an intellectual activity that makes them try out ideas, reflect, compare, and apply critical judgment to what is studied. This necessarily includes making use of insights acquired in various connections… that engages the mind and develops the personality. (p. 49)

Berge (1995a; 1995b) stated in categorical terms that the pedagogical/intellectual task is an important role of an online instructor, e-moderator, and facilitator as a distance/online educator. Under this particular category, the teacher "uses questions and probes for student responses that focus discussions on critical concepts, principles, and skills" (p. 2). But in addition to the intellectual/pedagogical dimension is the social aspect on collaboration and interaction (between students, faculty members, the course content, and the at-large learning community). Interaction is one of the most critical aspects of online learning experience which can take various forms and combination: student-course content, student-instructor, student-student, and so on (Anderson, 2004; Berge, 1995a, 1995b). Anderson (2004) highlighted the importance of social interaction as a valued network system, and noted that "communication technologies are used in education to enhance interaction between all participants in the educational transaction… interaction has long been a defining and critical component of the educational process and context" (p. 8). Interaction between students and the online faculty is important, since it is one of the best principles of good teaching practice for both students and their teachers to have regular contacts through interactive communication, feedbacks on completed assignments and other forms of motivation, mentorship to encourage active learning.

The last two necessary conditions for effective and successful online instruction, apart from both pedagogical and social, are managerial (organizational, procedural, and administrative) and technical. The online instructor does not have to be an expert in these two areas, but he/she needs some level of competence and mastery in order to be both supportive and responsive to the needs, demands, and expectations of the students. The ability to manage an online course could be challenging, because of the kinds of competencies in organizing and coordinating students' learning activities without interruption or with minimum social presence as required. Berge (1995a; 1995b) noted that the kinds of tasks that the facilitator and e-moderator have to deal

with including the ability to "be patient… synchronize and re-synchronize" as well as "be mindful of the proportion of instructor contribution to the conference…" (pp. 5-6). Lastly, the online instructor has to have some level of technical capability and understanding with which to resort to when dealing with students in the online course, and some of them may lack such technical know-how to be able to navigate comfortably in the virtual, online environment. Without any technical expertise, the online facilitator and conference moderator have to have the required competence to be in a position to assist and work with the diverse student population, provide prior and in-between the course technical support or direction, and use technology effectively as an educational tool for teaching and learning. In the final analysis, it was suggested that with computer-enhanced information communication, "both the teacher and each student are challenged by new roles, functions, and tasks they need to perform". And, because of the nature and demands of online learning that involves autonomous, student-centered, and active participation, it is important to understand that "online instructors need to be aware that this can make some students and faculty profoundly uncomfortable and take positive steps to build both confidence and communicative competence in online instruction" (Berge, 1995a; 1995b, p. 7).

Conclusions

The new roles of an online instructor (as a facilitator, e-moderator, and "a ghost in the wings") can be both complex and challenging. It is complex, because of the four dimensions that Berge articulated: pedagogical, social, managerial, and technical. The teacher, in this regard, has to be able to do all the four roles competently for the good health of the course and in order not to get some students agitated or frustrated. But the roles can be equally challenging especially when the online instructor is new to the cyberspace or virtual learning environment, does not know what to do, and lacks the basic competencies. That is why some institutions (such as UMUC, Bowie State University) try to provide adequate training and skills to both online students and instructors in order to prepare them for successful online teaching and learning. To deal with the complex and challenging nature of online learning, it is necessary "to help online instructors make a successful transition from traditional teaching to online teaching" and equally important "to provide substantial training support and best practices for implementing those roles" (Liu, Bonk, Magiuka, Lee, & Su, 2005).

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