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E-Mentoring: An Innovative Twist to Traditional Mentoring

Kimberly Nicole Rowland[1]

Abstract

Many organizations have established and implemented traditional mentoring programs. Both qualitative and quantitative research studies have found that successful mentoring programs enhance productivity, job satisfaction and may ultimately lead to protégé advancement. Traditional methods of mentoring are created through the means of one on one relationships established between the mentor and the protégé. E-mentoring through the use of synchronous and asynchronous computer-mediated communication is a new means for establishing mentor protégé relationships by creating virtual teams. This paper seeks to compare and contrast traditional mentoring with e-mentoring and propose new innovative ways to use e-mentoring in an organizational setting.

Keywords: E-mentoring; mentoring; virtual learning; communication; technology; knowledge transfer; education; training.

[1] The University of Maryland University College. Doctoral Management Department 3501 University Blvd, East Adelphi Maryland, Unites States 201203 Phone: 973-592-7061 Email: Kimberlynrowland1@yahoo.com

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Introduction

Traditionally, mentoring programs have been established both within schools and organizations where individuals are mentored one-on-one in a synchronous environment. According to Takerian and Shekarchian (2008), "mentoring is an important development process for all involved. Employees who are mentored take more pride in their work and seek opportunities to create innovation which in turn creates profitability and cost saving for an organization.

Akin and Hilbern (2007), found the "definition of e-mentoring" to be the following: the merger of mentoring with electronic communications to develop and sustain mentoring relationships linking a senior individual (mentor) and a lesser skilled or experienced individual (protégé) independent of geography or scheduling conflicts. The authors believe that mentoring is transferring knowledge and skills from an established professional to a junior or new member of the field and e-mentoring uses an asynchronous electronic means to communicate and establish the support of a mentoring relationship (p. 1). The purpose of this paper is to discuss the effectiveness of e-mentoring. This paper begins with an introduction of traditional mentoring and e-mentoring. Then, the benefits of both will be discussed. Furthermore, the scope of e-mentoring will be defined along with what technologies are necessary to engage in e-mentoring. Finally, the pro's and con's of e-mentoring along with what organization types could most benefit from e-mentoring will be put forth. Conclusions will then be drawn from that discussion. For the sake of this paper, the term mentee and protégé will be used interchangeably.

Traditional Mentoring

Theory

Historically, it has been found that once an individual has completed basic training in a discipline, the individual starts to apply what has been learned in a practical setting. In other words, individuals learn through theory and that to which they have been exposed which can limit their advancement when it comes to experience on a leadership level. According to Tesone and Ricca (2005), "the inexperienced individual has three basic means of learning how to perform: observation, trial and error and tutelage. Tutelage comes in the form of a relationship between an experienced person and one who is lacking in practical experience" (p. 197). Regardless of the relationship, the literature suggests that both the mentor and protégé benefit from mentoring.

Colky and Young (2006) believe that mentoring in a traditional sense is a process that brings together the inexperienced and the experienced in an attempt where the former will gain knowledge, self-confidence, skills and other benefits from the later as they transition through the process. The authors suggest that mentoring in a traditional organizational structure helps form the basis for the mentoring in a virtual environment. In other words, the authors believe that it is important for a mentoring process to be established in a traditional method before moving into an e-mentoring process. Colky and Young (2006) mention that there are several keys to a successful mentoring program in a virtual environment such as trust, self-motivation, flexibility, communication skills and technological skills.

Mentors focus on a protégé's achievements and areas for growth through a one-on-one relationship that is non-threatening and non-judgmental. Butterworth, Henderson and Minshell (2008) indicated that mentoring is a relationship of lifelong learning for both, which may last beyond the mentorship. In the study conducted by Butterworth, Henderson and Minshell (2008) one of the mentors' biggest complaints was receiving work from their protégés at the last minute, while protégé's said some mentors were delayed in getting assessed work back to them. The mentor/protégé relationship is a partnership, and both parties need to agree upon a framework at the onset.

Practice

Cunningham (1993) discussed that mentoring programs in which organizations assigns or match mentors and protégés are increasing in popularity in both the private and public sector. Although such formalized mentoring programs are popular, they only constitute about 3 to 4% of the mentoring that is actually occurring. The author suggests that the bulk of mentoring activities are informal. According to the author, in order to create a more formalized mentoring process, a learning culture needs to be developed. Cunningham (1993) suggests some of the following: define the organization's needs for mentoring, recognize internal capabilities, develop a philosophy of a mentoring program, select mentors and protégés and develop an awareness of mentoring skills.

Benefits

The positive effects of mentoring are substantial for both the mentor and protégé. These benefits have been well documented (Baugh et al., 1999; Chao et al., 1992; Seibert, 1999). A study conducted by Baugh and Scandura (1999) was conducted using 275 executives. The study was used to test the effects of multiple mentors and attitudinal outcomes such as job satisfaction, organizational commitment, career expectations, and role conflict and ambiguity. The results were positive showing that one or more mentoring relationships in the workplace resulted in greater commitment and greater job satisfaction. Burke (1984) indicated that from a protégé perspective, mentoring relationships served several functions, such as career-oriented goals, psychosocial functions and role modeling. Researchers have also proven that women who have access to mentoring develop faster, have better resources, obtain feedback and gain reflected power (Headlam-Wells, 2004).

According to Gibb (1999), "the mentor may provide assimilation into the professional practice or expand the influence to the mentee to include skills enhancement and career development" (p. 90). Social exchange theory identifies the benefits to the mentor, in which the mentor has the opportunity to observe the professional value arising from the mentee/mentor relationship on either a personal or professional level (Gibb, 1999). Other benefits to the mentor relate to the communitarianism theory, which is more altruistic in nature. The communitarianism theory believes that motivation to become a mentor lies in a commitment to embedded values as a member of a community, which leads the mentor to gain intrinsic satisfaction through contribution to the institution regardless of extrinsic gain" (Etzioni, 1993). While traditional mentoring programs may be the most satisfying for many individuals, certain logistics exclude these relationships giving rise to another alternative such as e-mentoring (Tesone and Ricci, 2005).

Need For E-Mentoring

Definition of E-mentoring

E-mentoring has several different names: telementoring, cybermentoring, virtual mentoring and online mentoring. According to Adams and Crews, (2004) "telementoring involves more experienced individuals sharing experiences with younger or less experiences protégés with the mission of helping the protégé achieve a goal and or gain entry into the mentor's world" (p. 1). Through the use of email, online chats and conferencing tools, these electronic means can become vital assets in attaining this goal. E-mentoring remains reasonably new and still under researched (Headlam-Wells, 2004).
Mentors are individuals who are typically in later stages of their career and they mentor protégé's who are often in the beginning stages of their career (Baugh and Scandura 1999). Single and Muller (2001) defined e-mentoring as the following:

A relationship that is established between a more senior individual (mentor) and a lesser skilled or experienced individual (protégé), primarily using electronic communications, and that is intended to develop and grow the skills, knowledge, confidence, and cultural understanding of the protégé to help him or her succeed, while also assisting in the development of the mentor (p. 108).

Theory

While the literature on e-mentoring is starting to increase in recent years, Single and Single (2005) addressed the efficacy of structured e-mentoring programs and focused on one-on-one mentoring vs. e-mentoring in a group environment. The authors suggested that training and coaching were identified as important features of structured e-mentoring programs. They also suggested that all of the benefits associated with individual one-on-one mentoring were found to hold true in e-mentoring. According to their findings, e-mentoring provided psychosocial benefits such as self-esteem enhancement, confidence building, and support for risk-taking that protégés gain from successful mentoring relationships. This was due to impartiality, which allowed the relationships to develop and rely on individuals being open and honest with each other (Single and Single, 2005)….

Although many organizations including businesses, universities and professional societies are recognizing the benefits of mentoring Purcell (2004) believes e-mentoring can be more effective by integrating e-mail, telephone and face-to-face communication to make the relationships more successful. As noted by Purcell (2004) "initially a mentor-mentee relationship should be established in person rather than by e-mail or phone call, which will help to provide a better connection" (P. 284). Purcell believes that usage of group mentoring through a virtual environment can also be beneficial as long as the mentees with similar development interest can be found. Purcell (2004) states that, "regardless of the type of long distance mentoring model and means of communication used, the key to success will be the establishment of strong personal relationships based on mutual trust, respect and commitment" (p. 286).

Knowledge Transfer

The transfer of knowledge between the mentor and protégé through a virtual environment, which requires technology, is gradually increasing and adds value between groups, field expertise and leaders globally who wish to identify and incorporate new techniques. Through the use of electronic means (technology), knowledge transfer can impact organizations and organizational performance at various levels: individuals, products, and processes and the overall performance of the organization. Through e-mentoring knowledge transfer can facilitate employee learning by allowing the employee to grow and respond to market changes and technology. In other words, knowledge transfer can have an impact on employee learning, employee adaptability and job satisfaction, which ultimately will impact innovation and productivity in the work place. General Electric (GE) invests approximately one billion dollars every year on training, education and mentoring programs. GE believes that the results can be measured in the increasing leadership opportunities for its employees as well as the remarkable service it provides to its customers (Alhart, 2009).

Many organizations are developing a virtual mindset that supports a knowledge management platform. Individuals are able to discuss issues through the use of technology and obtain information at a faster speed than ever before. According to Gordon (2001), "things are accelerating so much more rapidly, today then they have in the past. The need is to be able to make rapid decisions based upon good information.

Many changes and challenges have materialized with education and the usage of technology in recent years. Technology has dramatically changed how one transfers knowledge. For example, individuals are able to obtain online degrees. Yet some find online learning difficult and prefer a more traditional route while others have flourished in this new on-line environment.

Aside from professional coaches who are brought into organizations, there are many business mentoring programs. For example, most Occupational Health (OH) nurses work alone or in small organizations. Groups and networks such as local OH groups, the Association of Occupational Health Nurse Practitioners and the Royal College of Nursing OH Forums can provide professional mentorship. Single and Single (2005) states that, "e-mentoring takes this benefit one step further because geographical distances and scheduling differences no longer become obstacles to engaging in mentoring as e-mentors and protégés could be from two completely different organizations, not only different departments within the same geographically proximate organizations" (p. 307). For example, a project called the Telementoring Young Women Project focused on paring through e-mentoring high school students with professional women in engineering, science, and computing. The goal was to increase the students' awareness of the various fields. One of the interesting aspects of this project was that many students reported the importance of impartiality for the protégés. Bennett reported (1998) that "many students said that their mentors were more than a friend but not like a parent in that they provided advice and support which was not judgmental" (p. 25). Similarly, Industrial Engineer Solutions (IIE) (2001) indicated that AT&T started to support mentoring programs in that it awarded MentorNet, an e-mail mentoring network, a two-year $300,000 grant to support the organization's outreach mentoring program to help boost the numbers of female engineering students.

Technology

Technology plays a significant role in e-mentoring and bridges the relationship established between both the mentor and the protégé. Through the use of technology e-mentoring fosters vocational, psychosocial and role-modeling functions. Through vocational means electronic conversations can take place where direction and instruction occur. The psychosocial perspectives include

electronic conversations dealing with life topics that can benefit both the mentor and mentee. Role-modeling can be supported by electronic communication through public recognition that can be posted on blogs and electronic bulletins for peers.

Learning management systems play a significant role in the type of technology used to foster online learning. Utilizing shared software and other tools such as Web 2.0 technologies enable mentor and protégé benefits as the tools offer a convenience for mutual connections. According to Harris and Rae (2009), "web 2.0 technologies encompass a variety of different meanings that include an increased emphasis on user generated content, data and content sharing, collaborative effort, new ways of interacting with Web-based applications, and the use of the Web as a social platform for generating, repositioning and consuming content" (p. 137). Web 2.0 technologies make up a variety of technologies such as Wikis that enables anyone to contribute or modify content with updated information, blogs that offers individuals an opportunity to have an answer and question forum and podcasts that allows individuals to download media files through the usage of RSS fees, enabling an individual to listen to MP3 files such as music and audio books. Other tools include social networks such as Facebook and Twitter as well as virtual worlds that allow a user to interact with others without geographical confines. The virtual world in a computer-simulated environment enables the user to design a virtual user that resembles the individual.

Other areas for review are the types of learning management systems, which can be used to foster a positive impact with e-mentoring. Bierema and Merriam (2002) state that, "technological advances and, in particular, forms of computer communication such as e-mail, listservs, chat groups, and computer conferencing offer the potential for enhancing the e-mentoring process" (p. 211). Although these tools exist and can offer enhancement to e-mentoring, these tools themselves can have an unenthusiastic response by individuals who are not technologically savvy or have the tools needed to participate in an e-mentoring environment. Single and Single (2005) states that, "as e-mentoring expands we encourage practitioners and researchers to be cognizant of narrowing, not widening, the digital divide. The digital divide is defined as a home computing gaps between White and affluent Americans and those who are ethnic minorities or poor" (p. 314). Even with technology being readily available, there are still a multitude of individuals who are unable to obtain a computer much less having access to an on-line environment where e-mentoring would occur.

E-mentoring development through the use of technology also involves the absence of body language. Hamilton and Scandura (2002) state "the absence of visual cues, such as body language and tone, in electronic interaction, places a heavier weight on language issues. The lack of face- to- face interaction emphasizes the rapport dynamic of communication over the power dynamic" (p. 397). To counteract this, the mentor and protégé can enhance their communication through the use of web cams or through the use of emoticons. Emoticons such as gestures and smiley faces can often make ambiguous messages clearer, where individuals can detect the seriousness or sarcasm in the message. When hearing a statement, one can often detect the seriousness or sarcasm in the voice. However, without the paralinguistic cues in the use of an e-mail message, it can be difficult for an individual to flag sarcasm (Kruger, et al., 2005). In other words, the language being used can be as important as what is actually being said, which can cause trust issues and the lack of effective communication in a virtual environment.

Examples

There has long been an interest in the effects of mentors on protégé career outcomes, and with scholars now beginning to examine mentoring across national boundaries. Carraher, Sullivan and Crocitto (2008) used survey information as well as company records for 299 expatriates (163 men, 136 women) in 10 countries to examine the impact of home- and host-country mentors upon expatriate effectiveness. They found that having a host-country mentor had a significant positive effect on the expatriate's organizational knowledge, organizational knowledge sharing, job performance, promotability, and perceptions of teamwork. Having a home-country mentor only had a significant positive effect on organizational knowledge, job performance, and promotability. Surprisingly, their results also revealed that having a home-country mentor had a significant, but negative effect on the expatriate's organizational identification and job satisfaction. It is quite possible that these differences are a result of cultural differences between the host and home country. For example, if the home-country mentor does not understand the organizational culture in the host-country, it can be quite difficult to teach the protégé how to handle the cultural differences, which can result in culture shock for the protégé.

Kyong –Jee, Zeng and Bonk (2005) conducted a study, which included 239 individuals most of whom were active in e-learning conferences or knowledgeable of the e-learning

field. The individuals were comprised of chief learning officers, training managers, trainer/instructors and e-learning developers. The respondents were asked 49 questions about the status of e-learning in respondent organizations as well as their predictions on future directions of e-learning. The findings indicated that 25% of the respondents believed that e-learning was already the dominant mentoring method while 50% believed that e-learning would become more dominant in the future. The survey results also indicated that more than 30% of the individuals believed that organizations would focus more on the creation of e-learning content. The survey revealed that respondents predicted that knowledge management tools, online simulations, wireless technologies, and reusable content objects would influence the delivery of e-learning over the next few years. The web through the use of social networking and other web-based software can unite teams, create collaboration and assist in problem solving, which will enable firms to compete in the twenty-first century (Kyong-Jee, Zeng and Bonk, 2005).

Benefits of E-mentoring

Research in North America has placed more emphasis on mentoring and gender in a traditional setting (Headlam-Wells, 2004). When it comes to gender roles, use of e-mentoring is one way to minimize the professional gap many women face. Although women continue to make inroads into management, they still struggle to gain leadership positions. Women also continue to face barriers when it comes to obtaining promotions (Headlam-Wells, Craig and Gosland, 2006). E-mentoring can be a positive intervention, helping women succeed by allowing them the opportunity to call upon individuals with more experience for assistance and encouragement. Rather than replicating the structure of face-to-face mentoring in management, web based mentoring can have positive implications for corporate and organizational strategies to help promote equality (Headlam-Wells, Craig and Gosland, 2006).

Senior management has access to information at their fingertips almost instantaneously. For example, through the use of e-mails and multimedia-enabled networks, management can communicate virtually and electronically with other departments as well as customers around the world. Multimedia-enabled networks, which involve video and audio functionality, can create powerful knowledge transferable relationships with colleagues as well as external customers. These tools along with e-mail can be vital in an e-mentoring environment that would foster knowledge transfer from the mentor to the protégé.

Employee benefits through virtual learning can possibly enable a broader network for both the mentor and protégé and overcome barriers that occur in informal and formal relationships where a mentor and protégé select each other out of mutual respect. For example, a formal or non-formal relationship that is organizationally driven in a non e-mentoring environment can be detrimental when interpersonal factors cause issues. If a protégé has a tarnished reputation and has been provided access to a mentor, the mentor has the option to either provide assistance to the protégé or help in the demise of the protégé's career based on the information that he or she has been provided.

In an e-mentoring environment the issue of partiality is erased. Hamilton and Scandura (2002) suggest that, "e-mentoring can provide options that counteract these effects and improve the situation by allowing protégés access to a larger, more diverse pool of mentors. Further, the virtual nature of e-mentoring does not rely on visual cues or proximity for the relationship to succeed" (p. 388). E-mentoring also provides additional benefits through group learning and interorgainzational connections. Facilitating this type of mentoring can also foster relationships that will create the absence of partiality, gender, and ethnicity issues that often result in an informal or formal traditional mentoring program. The use of e-mail allows the student-/protégé to search outside geographic and corporate restrictions for mentors and poses minimal if any disruption to the mentoring relationship should one or both members change jobs. In sum, online communication is an efficient and effective means for bringing the student/protégé and mentor together (Jones, 1996). In addition, interorganzational mentoring enables a protégé to interact and learn from diverse members of other organizations. According to Murrell, et al. (2008), "formal mentoring relationships that cut across traditional organizational boundaries may be a mechanism to facilitate positive interactions among the increasingly diverse members of today's organizations" (p. 290).

Availability

Emerging information technology and communication have made a significant impact on educational systems at every level. There are various tools that are needed and can be used to facilitate an effective e-mentoring program. Methods such as e-mail, list serves, Usenet, newsgroups, and threaded discussions through the use of Learning Management Systems and broadband space are needed to help formulate communication in a virtual environment. Osman (2005) suggests that WebCT is one of the technologies that are widely used in an online learning environment. Osman (2005) noted that, "the introduction of new-high –speed-on-line technologies have also created opportunities, whereby instructors can enrich their traditional lecture based instruction with asynchronous environments for the students to construct knowledge, and take more responsibility for their own learning" (p. 354). A sample study was conducted that included 31 students from different areas of specialization at the University of Sultan Qaboos University. The study was done in an attempt to investigate the student's reaction to the utility of WebCT. The results reflected that 96% of the respondents said they developed a strong feeling of community as a result of the use of communication tools and that WebCT had improved their skills. The main issue discovered was that 87% of the students found that a limited number of computers as well as network performance affected their level of use and benefit from the WebCT.

Web 2.0 technologies facilitated information sharing from person to person and caused the evolution of web-based communities such as Wikis, social-networking sites (Facebook, MySpace), blogs, and video-sharing. Rienzo and Han (2009) suggest that, "academic institutions at all levels are experimenting with these technologies to improve student learning experiences, and prepare them for a world in which work can be effectively accomplished through collaboration over the Internet, and geographic and time differences become increasingly irrelevant in sharing knowledge" (p. 123). The authors also confirm that this type of technology can be incorporated into management practices, the delivery of college courses as well and coordination in virtual teams.

Web 2.0 technologies offer meaningful collaboration between users by making information more accessible in organizations. Utilizing information such as blogs in an organization can allow organizational executives as well as other employees to share information. Blogs are also useful tools for mentoring in group settings. Marcille (2009) suggests that the only way to be heard in an organization may be through sharing ideas through tools such as Web2.0. In every organization there are voices greatly desiring to be heard and taking a lesson from those who used Web 2.0 in Barack Obama's campaign strategy is the way to share information, share ideas and connect to individuals who may be working remotely (Marcille, 2009).

Limitations

Although e-mentoring offers multiple benefits, it is not for everyone. Mentors and protégé's may find it difficult to engage in on-line e-mentoring because they believe it is impersonal. This may be found in individuals who represent generation X. Generation Xers were born between 1966-1976, and has been known to many as the generation with high levels of skepticism and having a "what's in it for me attitude". Generation Y are individuals who are born between 1977-1994 and are found to be more sophisticated and technologically wise. There is a possibility that conflict can arise between the X&Y generations when it comes to e-mentoring, especially when the mentor is from an X generation and the protégé is from the Y or Z generation and collaboration through the use of technology is the norm.

The availability of bandwidth can also be of concern for many. The days of the analog/digital 56k modem are starting to become obsolete (La Morete, 2001). Many individuals are concerned with the need for speed. In other words, obtaining the information quicker through the use of a cable modem is very important. This may become an issue when e-mentoring because although technology has significantly advanced, there are organizations where increasing bandwidth may not be cost effective and can hinder e-mentoring programs.

Trust and communication are vital elements within a virtual environment and would need to be obtained in an e-mentoring setting. As noted by Nemiro (2004), "virtual teams that have a strong interpersonal connection have high levels of information sharing and trust, and team members establish a personal bond that often goes beyond the team's work." A strong family-like connection among virtual team members can also assist in building

trust, respect and mutual understanding (Nemiro, 2004). Establishing a virtual bond and developing interpersonal connections without visual cues is critical to a successful e-mentoring program.

According to Nemiro, "communication is what brings the team together and moves it forward; communication creates synergy." Communication is vital in a virtual environment and can also be a challenge due to time zones, cultural backgrounds and individuals who may have issues regarding technology proficiencies. Nemiro (2004) suggests that, "there is an urgent need for virtual team members to learn how to be active and effective communicators, and to design an effective communication plan that supports their creative process" (p. 6). It is therefore important to focus more attention towards trust and effective communication as more e-mentoring programs develop. With regards to trust and communication, the study does not address the possibility of combining both on-line interaction and an initial face-to-face visit, which can possibly set the stage for establishing mutual trust and communication between the mentee and protégé. A further review of this combination may warrant future research.

Conclusion

It has been proven that employees tend to go the extra mile because they believe that the organization is concerned about their overall well-being. The objective of any mentoring program is to establish win-win situations for all participants; mentor, protégé and institution In other words, the incorporation of e-mentoring practices can play a significant role in attaining important organizational outcomes. Technology has now found its way into the Twenty-First Century and it is imperative that organizations magnify its use, which will enable innovation and growth in today's workforce. Through the use of information technology, which includes, e-mail, video-conferencing, voice mail and other electronic means, e-mentoring can be used as an innovative tool where shared knowledge can be transferred in a synchronous and asynchronous format.

It has been shown that there are multiple benefits in organizations having informal and formal mentoring programs. Organizations gain benefits from fostering an e-mentoring program. With today's use of technology it is quite possible that e-mentoring will have a greater impact on those who rely on social networking. E-mentoring can facilitate a knowledge-creating process that is beneficial in the management science field. E-mentoring can provide greater opportunities and access to Knowledge transfer. E-mentoring can have an impact on women, underrepresented minorities, employee learning, adaptability, development, job satisfaction, organizational productivity and increased revenue, and can also promote innovation.

Although there are benefits to e-mentoring, e-mentoring may not benefit all due to various factors such as a generational gaps that separate those who are not computer savvy or believe that the use of electronic means is an effective way of mentoring vs. Generation Y and Zers who rely heavily on technology as a means to effectively communicate.

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