Telementoring: Shaping Mentoring Relationships for the 21st Century

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“But what...is it good for?”—Engineer at the Advanced Computing Systems Division of IBM, commenting on the microchip. (Cerf and Navasky 1984)

Skeptics have questioned the value or practicality of adopting new technologies for centuries as traditional or familiar patterns of interaction and communication are easily and quickly altered. Although the value of any single innovation is difficult to predict, there is little doubt technological innovation is affecting virtually every aspect of our lives. These changes are clearly evident in our everyday lives. The clothes we wear and the cars we drive are produced in factories where automated machines have replaced a large part of the human work force involved in the mass production of goods. Instead of a human answering the telephone, we are greeted by a computerized recording or voice mail. Fax, e-mail, and instant messaging have made long-distance telephone calls and human interaction much less important for keeping in touch with family, friends, or co-workers. And we can purchase almost anything we might need on the Internet—from groceries and clothes to computers and cars. For most Americans, technology has changed how we conduct our personal and professional affairs in fundamental ways.

Despite the ubiquity of computer technology in the modern world, we might reasonably wonder if technology has in every case made real improvements in the quality of our lives and relationships. This is a question we should ask because we are bombarded with media and advertising that tell us how much better, more fun, or easier life will be with the use of this or that technological innovation. This is especially true in work settings and with computers as we are told that the latest software, or fastest computer, or high-speed Internet connection will make us more productive in our work. This is not to suggest, as is clearly the case in the introductory quotation, that the potential for technology is not perceived. We should indeed acknowledge that technology has tremendous potential for affecting the quality of life of the average individual. However, we should not uncritically accept the potential of technology for the development of human relationships that are the foundation to learning. Technology may be a rich resource but not a panacea for problems that occur in human relationships such as mentoring.

Whatever else mentoring is, it is fundamentally human, interpersonal, and value laden. In this chapter, I explore the relationship of technology to mentoring through what is called telementoring, the electronic version of mentoring. A key assumption that guides this exploration is that technology is altering the nature of human relationships, particularly mentoring relationships, in fundamental ways. Given the variation that human beings have in language, culture, social practices, and representations, how will the homogenizing effect of digital technology affect real and valued differences among
human beings? Will a technological substratum of digital electronics serve to unify all symbolic forms into a uniform system of codes? If digital technologies are uncritically adopted in the face of vital human need and difference, will important social and individual issues go unacknowledged and therefore unresolved? It seems likely that in this exploration I will probably raise more questions than I answer. But I think questions are appropriate given that we are only now at the dawn of the digital age and do not fully comprehend the impact of the technological innovations on our lives as we are witnessing and experiencing them.

What Is Telementoring?

A definition of telementoring begins with an understanding of traditional mentoring. An age-old method of training and learning, mentoring has existed in many societies throughout history (Chan 2000). Traditionally, a mentor was usually considered to be an older and more experienced person who shares his or her expertise and knowledge with a younger protégé (Chan 2000; Levinson et al. 1978; Phillips-Jones 1982). More recent formulations regard age as increasingly irrelevant whereas knowledge, skill, expertise, and experience become more essential (Daloz 1999; Haney 1997). How that knowledge, skill, and expertise are shared may vary. For example, Maynard and Furlong (1995) identify three models of mentoring: the apprenticeship model in which the protégé observes and learns from the mentor; the competency model in which the mentor gives systematic feedback to protégés about their skills and expertise; and the reflective model in which mentors support protégés in becoming reflective practitioners. Other analyses of traditional mentoring identify three broad purposes served by mentoring programs: educational or academic mentoring, career mentoring, and personal development mentoring (Dennis 1993).

With the advent of online applications for teaching and learning, telementoring has been conceptualized as the online or electronic version of mentoring (Chan 2000; Single and Muller 1999). Telementoring essentially serves the same purposes as traditional mentoring but uses technology to facilitate mentoring relationships. Typically, the interaction between mentor and protégé occurs through e-mail but it may also entail communication via numerous technologies such as instant messaging, audio and video conferencing, and online discussion boards. As such, telementoring may occur in both synchronous and asynchronous formats. Other terms for telementoring include e-mentoring, cyber-mentoring, or virtual mentoring (Single and Muller 1999).

The Impact of Technology on the Mentoring Relationship

Owing to wider possibilities for interaction between mentor and protégé through the compression of time and location, telementoring provides advantages over traditional modes of mentoring by linking mentors and protégés who could not otherwise interact. For example, a young adult in Atlanta can be linked with an expert in Phoenix through the use of computer technology, opening up the possibilities for interaction in ways that are difficult or impossible in traditional models of mentoring. Interaction between men-
Telementoring and proteges becomes easier since messages can be sent at any time. For instance, an e-mail message sent at 8 o’clock one evening could be answered at 6 o’clock the next morning, creating a communication avenue between individuals located across long distances. In this way, time and geographical location can be reconfigured to suit human needs instead of human interaction being subjected to the limitations of time and distance. Adult educators can more easily link learners with experts across continents and time zones using global digital technologies. Of course, all this assumes that access to global technologies is available and that both mentor and protégé have the knowledge to use digital technologies.

“Relationship”—The Essence of Mentoring

Daloz (1986, 1999) characterizes the essential nature of mentoring as establishing a meaningful, deep, and highly personal relationship between mentor and protégé. For protégés, mentors occupy a “psychic space somewhere between lover and parent” (Daloz 1999, p. 18). Anderson and Shannon (1995) conceptualize mentoring as involving three crucial dimensions of interpersonal interaction: (1) expressing care and concern, (2) opening ourselves, and (3) leading incrementally (1995). Beyond the fairly straightforward exchange of information that occurs in mentoring, mentors and protégés share a highly personal and, ideally, mutually satisfying relationship based on understanding, appreciation, and respect (Galbraith and Cohen 1995b). But when mentoring occurs in online environments, does computer technology modify the mentoring relationship, adding something of its own character to the nature of mentoring? How will digital communication affect interaction between mentor and protégés? What is the impact of technology on the quality and frequency of communication?

Since e-mail is frequently used, communication is often limited to the exchange of digital text transmissions, such as through e-mailed messages. However, since e-mail and other forms of online communication are asynchronous, text based, and relatively fast, they are significantly different from face-to-face or even telephone interactions. In a study of online learning in a university-sponsored program, Harris, O’Bryan, and Rotenberg (1996) recommend that protégés attend training sessions to be prepared to communicate appropriately and adequately online with their mentors because e-mail lacks the full range of communication cues that humans rely on in face-to-face interactions. The use of “smileys” such as “o-:)” or ALL CAPITAL LETTERS, or other text-based communication devices can help to compensate for the absence of voice intonation, body language, and facial expression typical of face-to-face conversation. Despite these cues, there is still a risk for misinterpretation or misunderstanding, which can be resolved at some later time by the next e-mail or digital communication.

All this points to the digital environment as having the potential to sacrificing the richness of human communication. Webs of significance that connect humans together in symbolically constituted forms of relationship are difficult to reproduce in digital format. How does the mentor read the digital text, e.g., e-mail message, in such a way to produce an understanding that is analogous to and as rich as face-to-face communication? How does the protégé interpret in an e-mail message what is intended as a friendly or support-
ive challenge to existing assumptions? And just how important is this problem of meaning construction in telementoring relationships? Other than generalized critiques of digital technologies, these issues have not been taken up in the literature on telementoring and remain, therefore, unproblematic. We simply do not know what the impact of digital technologies is on the depth and breadth of relationships that characterize meaningful mentoring.

Other considerations involved in creating meaningful mentor relationships concern power and status issues between mentor and protégé. Inattention to the issue of matching protégé to mentor can produce mentoring relationships that are unbalanced, such as where the senior person initiates contact and directs the interaction more frequently than the protégé (Goldman and Newman 1992; Moore 1991; Saunders, Robey, and Vavarek 1994). Similarly, protégés who seek advice via e-mail but must wait for several days to receive responses can be left wondering if there is a truly caring and mutually beneficial mentoring relationship at work. Other technological innovations, such as wireless devices, inherently truncate human interaction so that conversations are reduced to an exchange of quick, short messages. Aspects of the mentoring relationships where sustained communication and psychological and emotional support are important would be sacrificed in favor of quick and immediate communication.

Current projections suggest that half of the U.S. work force would use wireless communication technologies by the end of 2001. Wireless telephones are projected to overtake landline telephone communications by 2005 (The Universal Wireless Communications Consortium 2001). The advent of wireless technologies such as Internet-capable cell phones, hand-held computers, and personal digital assistants offer some promise that the digital divide may be reduced in the coming years. A basic reason for this is that wireless devices are generally less expensive and therefore more widely accessible to a broader range of the population. This trend is already quite common in parts of Asia where individuals send instant messages to each other throughout the day (Andersson 2001).

In addition, Internet service providers, cellular telephone companies, and hand-held computer companies (e.g., www.Palm.net) are beginning to offer mobile Internet and wireless communication services (Andersson 2001). With the wider availability of such wireless services, communication between mentors and protégés could take a sharply technological turn in the coming years. No longer bound by the need for face-to-face or even telephone conversations, short and instant communication is widely possible and could make a real impact on telementoring in the years ahead. However, unless telementoring relationships are organized so that technology complements rather than replaces face-to-face communication, the effect of quick and abbreviated communication may not lead to improvements in the structure of mentoring relationships. But mentoring relationships could be enhanced because mentors and protégés have access to each other in ways not previously possible.
Models of Telementoring

As a relatively new area of research, the growing literature on telementoring can be classified into two broad categories: educational and career related. Educational applications of telementoring typically involve linking students with subject-matter experts who provide expert guidance or information to students in learning environments (Foster 1999; Harris and Jones 1999; Wheeldon and Lehmann 1999). Learning environments can be classroom based, online, or a combination of both (Doyle 1995; Harris and Jones 1999). Career development is a second major category in which telementoring occurs. Studies related to career development describe telementoring as either a complement to traditional mentoring programs or as an innovation that extends mentoring in new directions (Bennett 1997; Bierema 1996; Kendall 1992; Kirk and Murrin 1999). Some telementoring projects incorporate features of both educational and career-related designs by linking professionals with students currently enrolled in educational institutions to provide subject-matter guidance as well as career advice and support (Duff 2000; O’Neill and Gomez 1996).

Perez and Dorman (2001) identify three broad categories of telementoring: pair mentoring, group mentoring, and ask an expert. Pair mentoring involves a long-term relationship between a protégé and a mentor. In this model, the mentor provides not only information but also social and psychological support for the protégé. Social development is considered as important as the acquisition of knowledge or skill. In this model, technological resources such as e-mail, audio, video, and other enhanced technologies are frequently used.

In group mentoring, an expert or group of experts is matched with a protégé or a group of protégés. Group mentoring may involve a single interaction or a sustained series of interactions over a longer period of time. Whatever the model employed, telementoring involves some kind of basic computer technology, including appropriate software such as chat rooms, bulletin boards, instant messaging, or e-mail.

The “ask an expert” model is usually a single or short-term exchange where protégés or novices ask an expert for guidance and assistance. In some instances, novices post questions to mentors, who serve primarily as knowledgeable sources of support and guidance. Mentors post answers to electronic archives or bulletin boards for later reference or use. In this model, the protégé receives short-term advice, instruction, or guidance from the mentor. The central feature of this model is information sharing between mentor and protégé. This formulation of mentoring alters the traditional concept of mentor where an ongoing relationship is the central facet of the mentor-protégé dyad. The particular advantage of “ask an expert” is that students are linked with experts whom they otherwise would never meet. However, this model of mentoring does little to promote the socialization or acculturation of protégés that has been identified as so important to mentoring relationships (Bierema 1996; Galbraith and Cohen 1995a).
Telemorntoring in Schools

A number of online resources now exist to assist learners and schools in creating telemorntoring programs. Among well-known online sites is the Hewlett Packard Telemorntor Program located on the International Telemorntor Program website (www.telemorntor.org/). The Hewlett Packard telemorntoring program, in operation since 1995, is designed to create successful mentor relationships between HP employees and students using e-mail communication (Foster 1999; Rea 2001).

Another prominent telemorntoring project, the National School Network telemorntoring program (http://nsn.bbn.com/telemorntor_wrkshp/tmlink.htm), works with local schools to establish telemorntoring programs that link volunteer adults with school learners. It also matches subject-matter experts with learners. Students can send homework assignments to experts for review before sending them on to the teacher. Teachers monitor the exchange.

Other telemorntoring programs are becoming available. For example, the National Science Foundation supported the development of the Telemorntoring Young Women in Science, Engineering, and Computing (Perez and Dorman 2001). Female high school students receive support from professional women in the sciences, enroll in college, and find a ready professional network among women with whom they have communicated during their formative years. The aim is to increase the number of women in male-dominated fields such as engineering and the sciences. The completed project now supports the establishment of similar programs.

A similar program, MentorNet (http://mentornet.net), matches college women to women professionals in the fields in science and engineering. The foundation of the program is careful matching of mentors with protégés. Program administrators have learned that matching on such variables as educational field, industry sector, and students’ educational level with the mentor’s earned degree (such as a Ph.D. student with a mentor who already earned a doctorate) promotes a high-quality experience for mentor and protégé. In addition, the program offers planned opportunities for discussions, community building, and evaluation, feedback, and intervention.

As teachers become trained in online teaching and learning, telemorntoring is likely to increase particularly as a way to enhance existing instructional designs. A drawback to this approach is that teachers and faculty may find it difficult to identify subject-matter experts as resources at the times they are needed for instruction.

Telemorntoring in Work Organizations

In the not-too-distant past, mentoring was commonly thought of as an informal relationship in the world of work where an elder statesman of the organization would take a “young lion” under his wing—what Daloz refers to as the “Yoda factor” (1999). Usually, mentoring relationships were male relationships in which the junior person was afforded
entry into an exclusive “good ol’ boy network.” A key characteristic of the mentoring relationship, then, was to ensure the continuity of community, culture, and identity between an elder generation and a new generation. In this sense, mentoring served an important gatekeeping and socializing function. Not everyone could get into the upper ranks of the organization and mentoring was seen as a way of screening in the “chosen ones.”

With the advent of affirmative action programs in the 1970s, women and excluded racial and ethnic groups entered occupations from which they were previously excluded (Hacker 1992). In this context of changing expectations and demographics, telementoring has become increasingly popular as a feature of formal mentoring programs within organizations (Dyson 1997). As technology has effected important changes in the workplace and the nature of work, telementoring has become a viable alternative to traditional mentoring programs and seems to fit the new organizational styles of work where employees are dispersed across time and place. In the context of telecommuting, telementoring seems a logical extension of the new work relationship. Affording access is even more convenient since linking individuals with differing backgrounds is easier. However, whether telementoring will serve the ends of expanding the ranks of women and minorities in high-status professions and leadership roles remains to be seen.

Juxtaposed against the idea of greater access, however, is the fact that wide-area computer networks and decentralized work environments have made consulting, freelancing, and work at home arrangements more commonplace. In this context, physical access to mentors may be more limited. Organizations will have to make conscious efforts to link mentors and protégés in this kind of work environment. Telementoring, then, can serve a real need in the absence of frequent contact between senior members of the organization and protégés.

**Sociocultural and Demographic Factors that Affect Telementoring**

Sociocultural factors related to gender and race affect the quality and duration of the mentoring relationship. Additionally, as discussed more fully in the next chapter, differences in power and status are multiplied when race or gender differences are present (Ragins and McFarlin 1990; Scandura and Ragins 1993; Thomas 2000). Bova (2000) reports that personal needs of protégés are often overlooked in cross-gender/cross-racial mentoring relationships. She says that it is critical in successful mentoring relationships that the protégés have a distinct sense of feeling appreciated by their mentors and that their contribution is viewed as important within the organization (Bova 2000). Thomas (2001) also supports this point of view, arguing that the needs of African Americans and other racial minorities differ from those of whites in mentoring relationships because they frequently face issues of negative stereotypes, peer resentment, and skepticism about competence. In addition, acquiring the values and knowing the history and organizational practices are vital to socialization within an organization. Bierema (1996) points out that mentoring relationships provide critical processes for women to learn the culture
of an organization. Mentors who take the time to guide new members of the organization in ways that are sensitive to the needs of the individual help ensure successful mentoring relationships. As a result of the importance of these relationship issues, mentor training is especially important in cross-racial or cross-gender mentoring pairs.

The significance of the foregoing for an assessment of telementoring programs is that many telementoring programs provide only a brief opportunity for exchanges between mentors and protégés, in contrast to a senior person or expert guiding, supporting, or promoting the interests of the protégé. As J. Harris (1999) points out, when brief exchanges, such as ask an expert style formats, develop into a “teleapprenticeship” type of relationship, the exchanges are longer lasting and involve deeper levels of communication regarding the topic or subject of mutual interest. Therefore, the purposes and goals of telementoring programs may vary depending on the format employed and will need to be sufficiently well communicated to both mentor and protégé in order to avoid confusion about what is to be expected from the mentoring process.

**The Digital Divide: The Social Distribution of Technology**

Much of the current discourse about technology and its impact paints a rosy picture that technology is providing a convenient quality of life for Americans. However, unequal access to technology, called the digital divide, means that some adults have more—and sometimes much more—access to the Internet than others. Patterns of access have typically mirrored social class, racial, and ethnic disparities found in other aspects of modern life. A report by the U.S. Department of Commerce (National Telecommunications and Information Administration 1999) documents that two of three Americans have no Internet access whatsoever. Lack of access is associated with low educational or income levels. Unless these individuals have access through educational sites or through work, they are unlikely to be able to participate in telementoring activities, although this may be less of a problem in school settings. One posited advantage of telementoring may, in fact, be illusory since Internet activity is unlikely after work or school hours due to lack of access.

What impact will such limitations have on participation in telementoring programs? Much of the current literature on telementoring assumes access to technology. However, if protégés and mentors are forced, by the lack of available technology, to communicate only during “official hours,” one might question just how effective telementoring is for meeting goals associated with mentoring programs.

**Race, Gender, Technology, and Telementoring**

Although gains have been made over the past several years, race and gender continue to be associated with unequal distribution of access to computer technology (National Telecommunications and Information Administration 2000). Unequal Internet access is strongly related to race and ethnicity status. African Americans and Hispanics continue to experience the lowest rates of access. In August 2000, Internet usage among African Americans was only 29.3 percent whereas Hispanic usage was only 23.7 percent (ibid.).
By comparison, nearly half of Asian Pacific Islanders were using the Internet. The rate of Internet usage for whites was estimated at 50.3 percent. Such differences in the rate of Internet use and access indicate that telementoring opportunities are unequally distributed within the population on the basis of race and ethnicity. The advantages provided by telementoring are very likely unequally available to African Americans, Hispanic Americans, and other ethnic minorities who are at a disadvantage in the digital divide.

Gender is also related to unequal access and use of technology. This is true in terms of the number of women in technology careers as well as technology use (American Association of University Women 1998). The significance of the gender gap is twofold. Although access to computing technology is available through education and work sites, computer knowledge and computer usage among women has lagged behind that of men. However, this may be changing. For example, according to the U.S. Department of Commerce, Internet use by women almost equaled that of men in 2000, with women’s rate of use at approximately 44 percent (National Telecommunications and Information Administration 2000).

Another important factor related to gender is the different communication styles of men and women in online environments. Such differences in communication styles pose a potential barrier to effective telementoring relationships involving men and women. For example, studies suggest that gender plays a role in how online communication takes place (Ferris 1996; McDowell 1998; Wojahn 1994). Women’s pattern of online talk is more conversational, resembling that of face-to-face conversation, different from men’s talk, which tends to be more factual and to the point (Ferris 1996). Cross-gender communication online must account for potential differences in communication style preferences that may serve as barriers to the mentoring process.

Although a few studies suggest that the mentoring process provides racial or ethnic minorities with vital information and access to the informal network, the process of mentoring minority protégés can be thwarted by inattention to racial, cultural, or gender factors. Cross-cultural, cross-racial and cross-gender mentoring sometimes ignites irrational fears and speculations precipitated by existing race and sex taboos (Davis and Watson 1982; Grier and Cobbs 1968; Kovel 1970; Thomas 1989). Sex taboos between white males and African American females may produce tension within the mentoring relationship. For example, there is the potential for gossip and innuendo when African American females and European American males are paired together. Similar concerns may also be involved in cross-gender mentoring relationships even though the racially charged nature of cross-racial relationships is absent. These issues are discussed in more detail in the next chapter. However, the essential point to be made here is that social constructions of face-to-face interactions between men and women and between black and white are reproduced in online environments. For example, Halbert (1999) found that online communication is a reflection of real-life communication and that instead of diminishing or eliminating the importance of socialized identities, online communication codifies them. Cross-race and cross-gender pairings require care and attention on the part of the mentor and the sponsoring agency or organization in order to minimize the adverse impact on the development of the protégé.
Privacy

Since telementoring communications occur online, another issue, virtually unaddressed in the literature, concerns the privacy of telementoring communications. Privacy and confidentiality remain a fundamental aspect of any mentoring relationships. With the growing number of warnings about the security of e-mail, chat rooms, and other forms of online communication, privacy becomes a sensitive issue for telementoring partners. This problem becomes even more pronounced when it is realized that e-mail communications using employers’ computer networks are subject to review by other members of the organization. Reluctance of protégés to probe issues of organizational problems with mentors via e-mail can dampen enthusiasm for telementoring as a way to link mentors and protégés across distance and time.

Technical solutions are available to address this issue. Mentors and protégés need to be aware of and skilled in the use of cryptographic software. Nevertheless, the legal rights of employers and sponsor organizations to open and read electronic communications have been upheld. This oversight condition, once realized by telementoring partners, can have a dampening effect on the nature of electronic communications and thus telementoring relationships.

Final Questions and Suggestions for Further Research

Several important questions remain unanswered regarding the quality, effectiveness, and impact of the telementoring technologies on mentoring interactions. First, although telementoring holds the promise of putting people together in relationships that might not otherwise have been possible, does the effect of distance and time depersonalize the relationship? This first question has to do with building of a sense of community in which participants feel genuinely connected to each and are able to share thoughts, ideas, and feelings. Research focused on online learning environments suggests that instructors can facilitate the development of community but this is by no means an automatic process. It involves attention to detail and caring for the needs of learners. Similarly, the nature of the relationship between mentor and protégé, generally considered to be a close, caring relationship (Caffarella and Olsen 1993), requires that mentors carefully construct online relationships with protégés so that a sense of connectedness and intimacy exists. As Bova (2000) contends, the characteristic of successful mentoring relationships in cross-gender or cross-racial situations is that protégés feel valued and that their work matters within the organization. Adult educators need to understand just how telementoring may alter the fundamental nature of the mentor-protégé relationship.

Second, do the goals and outcomes of telementoring differ from those of traditional mentoring? Is telementoring appropriate for some kinds of mentoring situations but not for others? For example, one of the key aspects of traditional mentoring programs is for mentors to smooth the way for new protégés by providing access to informal networks (Daloz 1986; Meyers and Smith 1999). Since telementoring involves relationships
between individuals separated by time and space, the problem of socialization becomes more acute since mentor and protégé are separated. Mentors can provide information about networks but may not actually be in a position to open doors or make introductions unless telementoring is used to supplement rather than replace traditional mentoring relationships.

Third, what effect does the quality and nature of online communication in telementoring relationships have on the mentoring process? It seems clear from research in other areas of online communication, for example, in online learning contexts and in computer-mediated discussions in bulletin boards and chat rooms, that gender differences play a significant role in access to and use of technology. A number of researchers have noted that skillful mentors possess good communication skills (e.g., Anderson and Shannon 1995; Collins 1983; Thomas 2001). Given these considerations, the central question is does the nature of technology affect the ability of mentors to facilitate the achievement of mentoring objectives for protégés in telementoring situations?

Conclusion

As technology’s impact on everyday life becomes more and more extensive, its impact on mentoring is also becoming more widely acknowledged. Telementoring is becoming an increasingly widespread mode for providing mentoring services. Although computer technology offers new possibilities for linking mentors and protégés, it is not a panacea for expanding mentoring opportunities to women, African Americans, and other previously marginalized groups. Adult educators who are interested in exploring telementoring relationships should be mindful of the effects of race and gender on issues of communication and access. In this regard, computer technologies appear not to be a solution to problems of traditional mentoring programs. In fact, lack of adequate access, training, and experience in technology may limit the possibilities for telementoring for some groups. Some research questions remain unanswered regarding just how technology alters the mentoring relationship. Practitioners are cautioned to proceed with care in designing and implementing telementoring programs, paying particular attention to the impact of technology on the human aspects of the mentoring relationship.

Protégés’ and mentors’ needs and goals should drive the mentoring process, not the uncritically examined promise of technology to solve problems related to distance, access, and human interaction and communication. With the advance of new technologies such as universal wireless access and communication, telementoring may take many new forms and go in new directions, increasingly opening up the possibilities for communication across time and space. Whatever technological advances hold, however, meeting basic human needs should be at the center of any development of telementoring in order for telementoring to be a useful and meaningful application in the lives of mentors and protégés.
Telementoring