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E-Mentoring: Implications for Organizational Learning and Development in a Wired World

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Research has established that mentoring is beneficial to participants. Belle Rose Ragins and John L. Cotton in their article for *Personnel Journal* assert: "In the race to the top, mentors can make the difference between getting onto the inside track and trailing behind in the field" (p. 20). The optimism for mentoring in the popular press assumes that individuals will be able to link up and develop great interactions rather easily. In reality, mentoring can be restrictive regarding who participates and when. Barriers such as organizational structure, interpersonal skills, cross-gender relationships, differences in ethnicity, and flexible working arrangements challenge the myth that finding mentors and fostering mentoring connections is effortless. Furthermore, these barriers occur disproportionately across gender and ethnicity. For instance, women may not initiate mentoring relationships at the same rate as their male counterparts, due to fears associated with cross-gender interpersonal relationships, such as sexual overtones. Male mentors are more likely to initiate relationships with male protégés. What's more, when mentoring occurs in spite of the above

barriers, mentoring outcomes tend to suffer. Electronic mentoring, or e-mentoring, may help overcome these mentoring problems by increasing the pool of available mentors and allowing relationships to develop in virtual space—relatively free of social bias.

E-mentoring refers to the process of using electronic means as the primary channel of communication between mentors and protégés (virtual mentoring has also been used to refer to the same process). The key distinction between electronic mentoring (e-mentoring) and traditional mentoring (t-mentoring) is reflected in the face-time between mentors and protégés. In traditional mentoring settings, the mentoring relationship is created and nurtured by frequent face-to-face contact between the protégé and the mentor. In e-mentoring, the mentor–protégé relationship may be created face-to-face or electronically, but the continuation primarily takes place electronically. Various electronic media, such as e-mail, chat, Web, and message boards may be employed. Thus, the foundation of the mentor–protégé relationship rests on a different type of interaction than that found in traditional mentoring.

Compared to t-mentoring, e-mentoring opens the door for greater flexibility in creating and sustaining relationships. For instance, since mentors are not limited to specific regional locations, more individuals can participate as mentors. Additionally, the reduced level of social cues over electronic media may allow greater opportunities for women and minorities to interact with mentors relatively bias-free. Face-to-face interactions may be distracted by visual cues, and issues related to setting, context, and atmosphere may hamper communication. E-mail and text-based messaging are leaner communication channels that allow for more direct information transfer—thereby minimizing contextual issues. Finally, individuals with alternative work schedules, such as telecommuters or those who work flex time, may still access mentors without altering their work arrangements. This continued access to the mentor might help sustain the relationship in instances where time constraints and work conflicts might not have allowed the mentorship to survive otherwise. The convenience offered by e-mentoring opens the opportunity to all in accessing a larger, more diverse range of mentors than might be readily available at work.

The use of electronic media in e-mentoring can extend beyond mere information gathering to emotional nurturing and fellowship. Current trends in technology, which include rich multimedia communication in real time, enable emotional expression and social bonding that one typically observes in face-to-face interactions. For instance, on-line medical groups provide emotional support to patients. On-line interest groups for food aficionados or garden enthusiasts provide a sense of belonging, self-esteem and personal validation to group members as their expertise is acknowledged and support is given freely. Thus, the use of electronic media for e-mentoring gives hope to individuals that they can establish on-line relationships in which someone they've never met before becomes a part of their life. Being a form of social support mechanism, mentorship can be expected to migrate to electronic media.



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This article explores the concept of e-mentoring, the potential benefits and challenges in extending technology to relationship building and nurturing, and the role e-mentoring plays in extending t-mentoring models. It addresses the influence of e-mentoring as a supplement to t-mentoring models in filling gaps in learning and development, providing much-needed support for career-building, skill-acquisition and coaching. It concludes with action steps to promote an e-mentoring program.

OVERCOMING MENTORING BARRIERS WITH E-MENTORING

The highest satisfaction ratings for mentoring relationships by protégés are typically found in informal relationships where mentor and protégé select one another out of mutual respect. Face-to-face meetings and organizational environments that foster close working relationships facilitate these informal pairings. However, barriers exist that make securing the one-on-one, face-to-face, counseling and support of a mentor difficult to attain. These barriers may be organizationally driven, may come from individual and interpersonal factors, or may be the by-product of the changing nature of work. 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. E-mentoring allows for greater flexibility in maintaining open lines of communication by providing more options for how and when information interchange takes place.

Organizational Barriers

Organizational culture has a major influence on organizational practices. Organizations with a nurturing culture provide formal and informal opportunities for the development of mentoring relationships. Organiza-

tions that lack managerial support for mentoring make it harder to develop such a relationship, particularly if it is not linked to the organization's reward system. For example, company policies may strongly advocate a hierarchical system, with the indirect effect of limiting access to potential mentors. E-mentoring addresses these barriers. Through the Internet, one can potentially access prospective mentors in one's field regardless of geographic location or organizational level.

Individual and Interpersonal Barriers

Lack of assertiveness, inadequate social skills, fear of distortion of approach, and low comfort levels have all been found to limit the initiation of mentoring relationships. Traditionally these factors play a central role in face-to-face interactions. One who is not assertive and is lacking social skills may fear approaching others, especially those who hold higher rank. Women do not want their interest in a male mentor to be misinterpreted. Minorities may not be comfortable with people who don't share their culture. These issues are lessened in an e-mentoring environment. Research on Internet-based networks has found that feelings of belonging and support exist based on shared interests rather than shared social characteristics. Thus, e-mentoring could benefit from emphasis on shared values, rather than on characteristics that are easily discernible face-to-face.

The Changing Nature of Work

Competition and globalization have brought about structural changes in organizations. Flatter and more flexible organizations place greater emphasis on self-development, focusing on continuous learning and skill development. The by-product is flexible and alternative work arrangements supporting nonlinear career paths. Job-sharing, compressed workweeks, and telecommuting all reduce opportunities to meet potential mentors face-to-face. E-mentoring provides

TABLE 1 E-MENTORING STRENGTHS

BARRIER	E-MENTORING ADVANTAGE
Organizational structure	Not geographically bound Lack of status cues ^a Increase pool of available mentors
Individual and interpersonal factors	Face-to-face interactions not required Less social cues present Increase pool of available mentors Increase diversity of participating mentors
Flexible/alternative work arrangements	Face-to-face interactions not required Not geographically bound Not time constrained (asynchronous)

^a Status, gender and ethnicity may be volunteered or revealed in resumes and biographical references.

an option to approach mentors that is more convenient, providing flexibility through temporal independence (Table 1).

E-MENTORING DIMENSIONS

E-mentoring relies on computer-mediated communication, such as via the Internet, to connect mentors and protégés. The interconnectivity of people and computers creates a social network in virtual space. Relationships that simulate mentoring functions are built through electronic conversations. On-line discussions of topics such as career guidance, life events, and personal successes should result in bonding that is similar to the bonding in traditional mentoring. These conversations also nourish e-mentorship as it evolves through the mentoring phases. However, compared to traditional mentoring, e-mentoring is likely to have a different effect for certain mentoring functions and phases.

E-Mentoring Functions

Electronic media may facilitate some roles and hinder others. However, the general broad classes of vocational, psychosocial, and role-modeling functions are still present to some extent. Vocational support may be provided through electronic or virtual coaching. Many Web sites offer support, ranging from resume writing and presentation skills

to recommending career growth guidelines. There are on-line handbooks and skill development modules developed to support career success. However, vocational support in mentoring literature refers to more than coaching guidelines. It also includes providing visibility and challenging career projects to develop the protégé over the long term. In e-mentoring, it may be challenging to provide more than coaching support, since mentors are most likely not located in proximity to protégés. While they may be in the same field, e-mentors are at a disadvantage by not being in the same organization to actively develop protégé capabilities. Nonetheless, e-mentors can share anecdotal stories, provide their experience in career moves, and offer collaboration on projects to provide the benefits of vocational support.

The psychosocial function of a mentoring relationship addresses the interpersonal aspects of the mentoring relationship and involves providing psychological and emotional support to a protégé. Given that many of the early groups formed on the Internet were created to provide psychological and emotional support, electronic media may facilitate providing such support. For instance, research suggests that electronic communication enables more honest feedback than face-to-face communication. Also, electronic dialogue on shared life events, supportive comments, and constructive feedback may enable the development of trust and

creation of meaning required to drive a mentoring relationship.

Role-modeling provides the passive link between the mentor's behavior and the path to success. Traditionally, this is mastered through direct observation of the mentor's conduct. In e-mentoring, mentors and protégés may be separated by vast geographical distances that render any type of personal observation unfeasible. However, since role-modeling may also be viewed as a passive psychosocial function, it is possible that a form of role-modeling may still exist in e-mentorship. Advice and comments on image presentation may influence behavior change on the part of the protégé. Unlike direct observation, indirect linkages of awards tied to actions taken on the part of the e-mentor may be a creative means of influencing protégé behavior (Tables 2 and 3).

E-Mentoring Phases

One of the promises of e-mentoring is its presumed ability to reduce the amount of time needed to manage a traditional mentoring relationship. Paradoxically, it also takes time

to establish and manage an e-mentoring relationship. Answering e-mails, on-line chat sessions, postings on electronic forums and bulletin boards, and telephone communication all take time. While it is convenient to believe e-mentoring is a panacea for time management, the reality is that the problem of "not enough time for development" does not go away. However, by allowing mentor pairs to communicate at all hours, e-mentoring does allow for greater flexibility in maintaining open lines of communication and in navigating the evolution of relationships.

The expectation that both mentor and protégé will progressively grow and cultivate career-advancement strategies is one of the core objectives of e-mentoring. The initiation phase entails a get-acquainted period allowing for the establishment of expectations and communication rituals. This phase involves acquiring information to certify authority, establish trust, manage expectations, show enthusiasm, and in general, create an atmosphere of acceptance. Research from distance-learning and e-learning has supported developing guidelines, managing expectations, showing enthusiasm, and commitment to

TABLE 2 E-MENTORING EXCHANGE AND MENTORING FUNCTIONS

E-MENTORING EXCHANGE	MENTORING FUNCTION
◆ Career coaching guidance and advice on career opportunities on-line and through e-mail conversations	Vocational
◆ E-mail conversations and attachments on resume writing instruction, review, and feedback	Electronic conversations directing, instructing, and/or providing career information. In addition to e-mail attachments, this can be supported through electronic bulletin postings.
◆ Electronic collaboration on projects and research	
◆ Invitation to present project or research	
◆ E-mail conversations on life events	Psychosocial
◆ E-mail support comments and feedback	Electronic conversations dealing with personal life topics. Electronic chemistry can be developed through shared life events and trust development. This can be supported through general e-mentoring and e-protégé training, as well as Netiquette training.
◆ Use of emoticons to enhance comments	
◆ Shared Internet humor	
◆ Posting e-mentor resume	Role-modeling
◆ Posting awards and recognition e-mentor has garnered	Electronic conversations relating to e-mentor successes. This can be supported through electronic posting of resumes and awards as well as public recognition of e-mentors on electronic bulletins.
◆ E-mentor discussion of personal career path and influence on personal success	

TABLE 3 ENCOURAGING E-MENTORING DEVELOPMENT

E-MENTORING PRACTICE	MENTORING PHASE
<ul style="list-style-type: none">◆ Computer network infrastructure◆ Program guidelines◆ Program evaluation procedures◆ Posting resumes and biographies◆ Responsibility and expectations of parties◆ Opportunity to meet face-to-face	Initiation
<ul style="list-style-type: none">◆ Mentoring training◆ Netiquette training^a◆ System administrator support◆ Program recognition◆ Celebrate successes◆ Opportunity to meet face-to-face	Cultivation
<ul style="list-style-type: none">◆ Acknowledging comments◆ Personal communication	Separation/termination Redefinition

^a Netiquette refers to Internet social protocol. It is a combination of the terms "Net" and "etiquette."

the relationship as crucial to influencing satisfaction with on-line courses. This reasoning may be extended to e-mentoring, illustrating how crucial the initiation phase may be in the development of "electronic chemistry." Assistance in maneuvering through this phase includes the establishment of computer network infrastructure and the generation of program guidelines, program expectations, and evaluation procedures. The parties may meet face-to-face to add richness to future e-mail conversations, but that is not a requirement. Once the network is in place, the greatest influencing factor in this phase is the encouragement to start conversing.

As the relationship is cultivated, both parties will expect to reap the benefits of e-mentoring. Experience with each other as well as experience with technology will greatly influence the benefits usually associated with this phase. E-mentoring may still provide continued encouragement and feedback through careful questioning, constructive criticism and good advice in a supportive atmosphere of open communication. This may be accomplished through continued training on e-mentor and e-protégé roles, system administrator support in recognizing program successes, and promoting program recognition. Further, mentors and

protégés may meet in person to put a face to a name and to exchange personal information; however, this is not critical.

As the relationship proceeds, the progression of the e-protégé beyond the need of the current e-mentoring relationship signifies the separation phase. The e-mentor and protégé may already be at different locations, so they may not experience severed ties or physical relocation. Another possibility is that the e-mentorship goes from cultivation to termination, bypassing separation altogether. In instances where individuals feel they are not receiving much from the relationship, they may opt to go straight to termination. Since e-mentoring is "virtual" to begin with, it is perhaps easier to terminate the relationship by not reconnecting with the e-mentor. If the relationship is totally virtual, there is no problem that might otherwise occur due to seeing that person at work the next day, or having to set up a meeting to officially end one's relationship with the mentor.

INFUSING TECHNOLOGY IN MENTORING

In e-mentoring, the relationship between the mentor and the protégé is modified by

technology. As the medium through which communication occurs, technology plays a defining role in e-mentoring. The amount of electronic communication that takes place within the e-mentoring relationship classifies to what degree e-mentoring exists. At one end of the continuum you have full e-mentoring (FEM) relationships, where 100 percent of the communication within the mentoring relationship occurs via electronic means. At the other extreme are t-mentoring relationships, where there is no electronic communication between the protégé and mentor. In between, you have varying levels at which technology can play a role. However, to be called e-mentoring, 75 percent or more of the mentorship process must have taken place through electronic means. Such e-mentoring is referred to as partial e-mentoring (PEM).

Factors Influencing Use of Technology

As shown in Fig. 1, technology affects both the mentor and the protégé through its interaction with individual factors (gender, ethnicity, age, and personality) and, less directly, by way of influencing content and delivery of the message. Technology use, in

turn, is affected by situational factors, social factors, perceived ease of use and perceived usefulness.

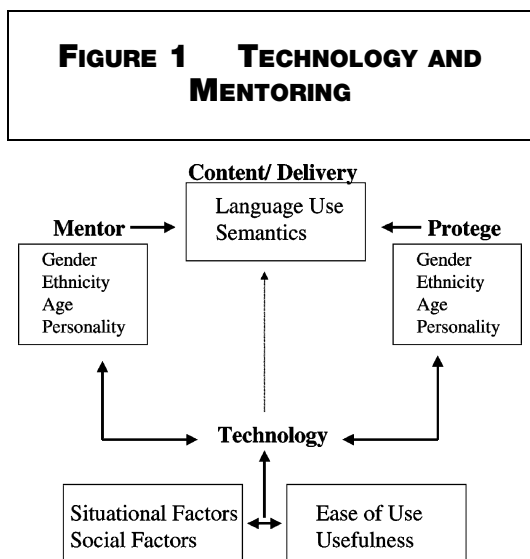
Situational factors. Both organizational culture and the nature of the job strongly influence use of technology. Organizations at the forefront of technology push the use of technology in new and innovative ways. By fostering technology growth, these organizations encourage continuous learning and reward increasing experience with technology. Therefore, individuals in these organizations are more comfortable using electronic means of communication and it becomes relatively effortless to extend the use of technology into mentoring relationships.

Social factors. Research supports the connection between the use of technology by others and its effect on an individual's subsequent use of that technology. In settings where other co-workers and friends are familiar with technology and praise its virtues, individuals are more likely to adopt that technology. Conversely, in situations where others present uninspiring outcomes of technology, individuals are less likely to use that technology, or approach it with trepidation. In social support networks that rely on electronic communication, individuals are more likely to venture into e-mentoring.

Ease of use and usefulness. The more useful and easy-to-use a technology is perceived to be, the more likely it is that the technology will be utilized. Greater ease of Internet access has reduced perceptions of the complexity of Internet use. Hence people are more likely to turn to the Internet and start an electronic dialogue that evolves into a mentoring relationship.

The Interaction of Technology and Individual Factors

Gender. Early research showed that women tend to have more negative attitudes toward using computing technology than men did.



More recent studies have found that once individuals are old enough to work, gender differences toward computer usage tend to disappear. As more women entered the workplace, they gained more experience in using technology. In addition, the decreasing cost of owning and maintaining a computer makes it easier to add a PC in the home. All of these factors have mitigated female anxiety associated with computer use, while increasing self-efficacy, allowing women to capitalize on technological experiences in developing e-mentorship relationships.

Use of Internet-based communication is also different between men and women. Men view the medium in a competitive mode to elevate their own status, while women see the medium as means to developing collaboration and support networks, increasing learning and communication of the entire group. Women generally use e-mail to form interactive and context-building exchanges, whereas men tend to focus more on message content. Thus, psychosocial aspects of e-mentoring may come more naturally to women than men.

Another component affecting gender is the domination of a conversation by participants based on their position, role, and personality. Because women are more reactive to visual cues, they may respond to domination cues exhibited by men and let them take over the conversation. Electronic communication can equalize access by allowing everyone to speak simultaneously without interruptions. Cues that may favor one gender or one individual over another are diminished in electronic format. As a result e-mentoring may increase the ability of being heard, especially for women.

Ethnicity. Although the “technology gap” between whites and minorities is narrowing, it still exists. Minorities do not own as many PCs as whites, nor do they have as much access to PCs when compared with whites. The general demographics of those who own computers tend to support higher education (at least college graduates), higher income, and are concentrated more in the

western section of the U.S. There are many Internet-based e-mentoring programs geared toward minorities. However, these programs will not be as effective unless they can first provide access to technology. Therefore, trying to reach minorities may be difficult without a collaborative effort to address technology inequalities.

Age. Demographically, the largest age group of computer owners is those between the ages of 35 and 54. Beyond the age of 54, research has shown that individuals are not as familiar with this technology. Because of their lack of ease and comfort with technology, many do not use the Web. Limited use of technology decreases opportunities for interaction to build an experience base. The lower one’s experience level, the more likely one will perceive the technology as complex. The more complex the technology is perceived to be, the greater the expected effort to use it. Greater effort decreases the likelihood of utilizing the technology. This pattern then negatively reinforces acceptance of technology. While older individuals may have a lot to contribute to the growth of those junior to them, the implication for e-mentoring is that the limited use of the Internet by older cohorts could potentially reduce the pool of potential e-mentors.

Personality. While research on Web-based classes shows, on average, improved test scores for students, this performance increase is not the same for all students. Both ability and attitude predict achieved grade and satisfaction level in Web-based courses. While ability is linked to course knowledge and technology competence, attitude appears to be linked to individual personality factors. For instance, students who were more introverted and more open to new experience have been found to have higher performance using Web-based instruction. It appears that individual differences may interact with technology to influence the effect of e-mentoring, and that not all individuals will benefit the same from e-mentoring.

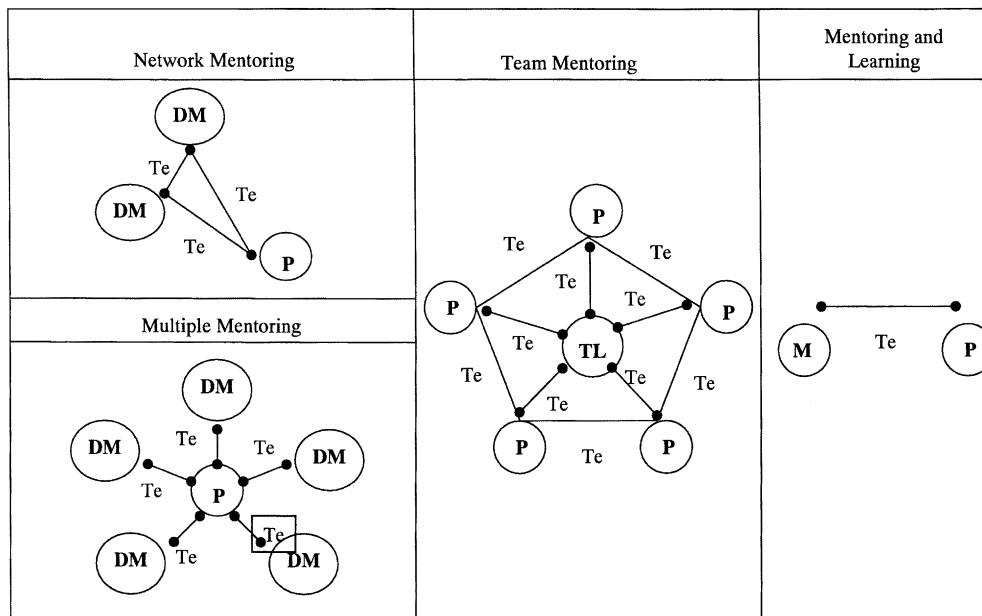
The Influence of Technology on Content/Delivery

The absence of visual and verbal cues, such as body language and tone, in electronic interaction, places a heavier weight on language issues. The lack of face-to-face contact emphasizes the rapport dynamic of communication over the power dynamic. How language is used may be as important as what is said. Conveying feeling and emotion via a medium that is lean will necessitate development of unique techniques to create relational attachment. Thus, it is not just computer literacy that influences e-mentoring, but also the ability to personalize and emotionalize the media that will establish electronic chemistry. As both e-mentors and e-protégés improve their information-handling skills (technology and other sources of information), their ability to develop electronic rapport should improve.

INTEGRATING TECHNOLOGY IN TRADITIONAL MENTORING MODELS

E-mentoring is not the first framework to address barriers to mentoring. Traditional mentoring models have been restructured to incorporate new work arrangements that redefine the one-to-one, face-to-face, strong ties attachment model. These traditional models advocate continuous learning by recognizing that one person may not provide all the mentoring needed. E-mentoring can support these models by extending their reach. Through technology, e-mentoring reduces physical and spatial constraints, thereby freeing these models to be applied in a greater combination of ways. Referring to Fig. 2, these models are network mentoring, multiple mentoring, team mentoring, and mentoring and learning. Technology can be inserted into

FIGURE 2 TECHNOLOGY IN TRADITIONAL MENTORING MODELS



DM = Developmental Mentor P = Protégé
 TL = Team Leader M = Mentor
 Te = Technology

any communication pair—rendering that model “electronic” to a degree.

Technology and the Network and Multiple Mentoring Models

The network approach to mentoring accepts the legitimacy of the developmental role played by different individuals in facilitating the growth of a protégé. While the structure of one’s network may be fluid, fluctuating with personal and organizational needs, the set of individuals in the developmental network are actively involved in advancing the protégé’s career. Organizational factors may constrain opportunities for developing networks, whereas individual conditions may influence the degree to which the individual finds or creates a network (help-seeking behavior). Through technology, developmental mentors can cross-organizational boundaries, removing the constraint placed on who or where developmental mentors may be located. For example, a protégé may have an immediate supervisor who provides vocational support and role-modeling, while at the same time, also have an e-mentor giving psychosocial support. Moreover, the entire network may be linked electronically. Technology provides an avenue to add flexibility to the network and multiple mentoring models by combining varying stages of the e-mentoring and t-mentoring process.

Technology and the Team Mentoring Model

In team mentoring, all members should be able to benefit from the leader’s interactions with team members. Thus, it is not a dyadic relationship, but a set of relationships with the team leader in the role of a centrally located mentor (see Fig. 2). As opposed to having many developmental mentors support an individual, as found in network mentoring, team mentoring has many individuals being supported by one team mentor. Here, the team leader has equal access to team members and can influence each individually as well as collectively. In turn, each of the

team members can serve as peer mentors to one another in the context of team cohesiveness and interdependence. Current research on virtual teams has found that electronic socialization, participation and cohesion can be developed through electronic communication. Electronic communication using group decision support software can facilitate group communication processes by expediting the interaction process and promoting intragroup communication. The team leader as mentor to the group is facilitated in an electronic environment and can effectively use technology to support trust development and contribute to a sense of team spirit.

Technology and the Mentoring and Learning Model

Research findings support the assertion that mentors are valuable resources for establishing and maintaining learning organizations. Vocational support is positively linked to relational job learning. Role-modeling is associated with skill development. Imitation and observation give impetus to strengthen one’s own skills. Therefore, mentors are important to managing the learning process that occurs in the mentoring relationship. Technology has played an increasing role in learning. E-learning research has found that a high degree of on-line interaction and collaboration results in higher levels of learning, as reflected by better test scores compared with students who participated in face-to-face settings. Research supports the creation of a virtual learning space where shared learning structures can enhance conceptual thinking. Mentors and protégés may thus enhance the learning process by harnessing technology to get more information on both the interpersonal and organizational aspects of their jobs.

ACTION STEPS IN ADVOCATING AN E-MENTORING PROGRAM

E-mentoring places the burden of the relationship equally on both the e-mentor and

the e-protégé. Traditionally, t-mentoring places greater responsibility on the mentor to develop the protégé. Due to the face-to-face nature of t-mentorship, the mentor is better able to quickly assess the level of need of the protégé and take proactive actions in directing the relationship. This alleviates much of the burden for development from the protégé, especially if the protégé is not very industrious. However, the virtual nature of e-mentoring makes it easier for the relationship to wither without equal effort from the e-protégé. A lot more patience will be required of both the e-mentor and the e-protégé to stay with the e-mentorship and invest in building it. To that end, the action steps below are advocated to support commitment and build enthusiasm in developing an e-mentoring program. Regardless of program type (FEM or PEM), similar issues are present in moving mentoring to an electronic forum. The action steps (technology infrastructure, training, managerial support, establishing goals and expectations, and selection procedures) provide a process for undertaking these challenges.

Technology Infrastructure

The technology to carry out an e-mentoring program must be present, and support must be available. This very basic first step may easily be overlooked or assumed. In a pilot program designed to provide a support network for new teachers in remote teaching assignments, the participation rate was so low that full-scale development of the program was postponed. Not all teachers at the remote site had computers. Other programs have declared themselves on-line only to find out that the computer software communication packages are not compatible or computer support is inadequate. For instance, in the case of one on-line mentoring program, the server went down after the launch of the program, delaying the actual program start by a week. The impact of not having the technology infrastructure in place (both hardware and software) should not be underestimated—regardless of the degree

to which communication is conducted electronically.

Training

Because most organizations employ intranets and e-mail systems, further technology training may not be required prior to pursuing an e-mentoring program. However, using technology for information gathering is not the same as using it to build relationships. Basic skills are needed to use e-mail programs and to learn how to attach files. Video-conferencing, electronic chat, and Web-based community accessing skills may also need to be taught. This may involve having participants take basic courses in multimedia communication. In addition, not all electronic communication is positive. Negative interactions and electronic heckling (flaming) can and does occur. Basic skills in appropriateness of conversation as well as Internet “Netiquette” should be provided to smooth rough starts and educate individuals on the basic do’s and don’ts of on-line life. The need to develop strong technical and Internet navigation skills cannot be overemphasized. Being aware of computers and the Internet is not enough.

Managerial Support

It is important to prioritize e-mentoring programs and provide full managerial support for their implementation. Managerial support involves providing resources in hardware, software, and personnel needed for system administration. In addition, managerial support extends into providing time at work for training and for taking advantage of the e-mentoring process, so that it does not become another drain to an individual’s already busy schedule. In creating the culture for e-mentoring, managerial support should also include organizational rewards for program participation. In instances where e-mentoring is informally approached, management can still recognize the efforts of participants. In any case, management should be involved in recognizing the program and celebrating successes.

Establishing Goals and Expectations

Develop e-mentoring program goals early and align e-mentoring expectations with program goals. Guidelines and procedures should be established prior to launching the e-mentoring program, delineating selection, monitoring and evaluation standards. This may seem like common sense, but lack of clear expectations has resulted in communication gaffes and disappointments. For example, a student signed up to join an e-mentoring program set up to connect college students with experts in their fields. At the end of the semester the student proclaimed the e-mentoring a waste of time. The reason was that she did not receive a job offer from the company. Clearly the student's expectation was that this program was a way to get the inside track on a job opportunity. The e-mentoring program, on the other hand, prided itself on providing students with an e-mentor who could coach and guide them for life-long learning. Having the goals established and the guidelines communicated before the program starts is just the first installment. Once the program has started, modifications will be needed to reflect program evolution. Evaluation methods need to also change to reflect the effects of technical skills, along with traditional assessments of program goal achievement. Whether the e-mentoring program is formal or informal, FEM or PEM, defining clear expectations, limits, and responsibilities minimizes disappointments.

Selection Procedures

E-mentoring programs are typically outgrowths of t-mentoring programs attempting to reach larger and more diversified audiences. As a result, organizations tend to use the same procedures for selecting e-mentoring participants as they do for t-mentoring programs. However, the desired characteristics of an e-mentor and an e-protégé may not be the same as those found in t-mentoring. Unfortunately, there is little research that

compares e-mentoring to t-mentoring. We do have research in the e-learning field that shows how personality and attitude play significant roles in predicting successful e-learning outcomes. We also know that the lack of spontaneity and intimacy associated with personal face-to-face communication does leave some feeling cold and impersonal when interacting through technology. Thus, whatever the means of matching participants (e-mentor to e-protégé), initial standards should be developed to assess individual types who may be better suited than others to maximize the use of e-mentoring. The characteristics of the participants may affect the implementation and the outcome of an e-mentoring program. It also requires sensitivity to the types of individuals who would be involved as e-mentors and e-protégés.

CONCLUSION

E-mentoring takes advantage of technology to broaden the definition of mentoring relationships by relaxing the constraints of geographical location and time. A mentor is a guide, role model, counselor and friend. As long as these functions are being performed, the mentor's organizational location in relation to the protégé is immaterial to the success of the e-mentoring relationship. The flexibility and convenience afforded by e-mentoring can be exploited to address barriers to mentoring. Capitalizing on technology, e-mentoring also supports the expansion of t-mentoring models beyond the typical one-to-one relationship. E-mentoring enhances these models by making them more practical and flexible to implement. E-mentoring also provides another option in support of e-learning and skill development.

While research on e-mentoring is just beginning, initial concerns regarding the lack of face-to-face interaction and a decrease in the richness of communication may not be as much of an issue as initially assumed. Anecdotal and preliminary observations seem to support the finding that there may be more freedom of discussion and feedback between

mentors and protégés than would have occurred outside of the electronic media. Also, fear of using mentors outside the organization is not realized. Research has shown that external mentors do not reduce organizational commitment.

The Internet is clearly influencing personal interactions as a new medium for communication. The use of technology such as the Web in forming electronic relationships,

including e-mentoring, is venturing into uncharted territory. The invitation is for more research into this area as e-mentoring programs proliferate. The action steps presented in the article are general guidelines upon which we can continue to build.



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