



DO-IT

Opening Doors: Mentoring on the Internet

E-mentoring and individuals with disabilities

by Sheryl Burgstahler, Ph.D.

Most of us can think of people in our lives, more experienced than ourselves, who have supplied information, offered advice, presented a challenge, initiated friendship, or simply expressed an interest in our development as a person. Without their intervention we may have remained on the same path, perhaps continuing a horizontal progression through our academic, career, or personal lives.

The term “mentor” has its origin in Homer’s *Odyssey* when a man named Mentor was entrusted with the education of the son of Odysseus. “Protégé” refers to the person who is the focus of the mentor. Today, mentoring is associated with a variety of activities including teaching, counseling, sponsoring, role modeling, job shadowing, academic and career guidance, and networking.

DO-IT Mentors are valuable resources to their protégés in *DO-IT* (Disabilities, Opportunities, Internetworking, and Technology) programs. Most *Mentors* are college students, faculty, practicing engineers, scientists, or other professionals who have disabilities. Protégés are participants in the *DO-IT Scholars* or *Pals* program as well as *DO-IT*-sponsored projects such as *AccessComputing* and *AccessSTEM*. These students are making plans for postsecondary education and employment. They all have disabilities, including vision, hearing, mobility, health impairments, and specific learning disabilities. Frequent electronic communications and personal contacts bring *DO-IT* protégés and *Mentors* together to facilitate academic, career, and personal achievements.

Introducing protégés to mentors with similar disabilities is a strength of *DO-IT*. As reported by one protégé, she had never met an adult with

a hearing impairment like hers before getting involved in *DO-IT*: “But when I met him, I was so surprised how he had such a normal life, and he had a family, and he worked with people who had normal hearing. So he made me feel a lot better about my future.”

Participants learn strategies for success in academics and employment. *Mentors* provide direction and motivation, instill values, promote professionalism, and help protégés develop leadership skills. As one *Scholar* noted, “It feels so nice to know that there are adults with disabilities or who know a lot about disabilities, because I think that people who are about to go to college or start their adult life can learn a lot from mentors....” As participants move from high school to college and careers they too become *Mentors*, sharing their experiences with younger participants.

There are probably as many mentoring styles as there are personality types and no one can be everything to one person. Each *DO-IT* participant benefits from contact with several *Mentors*.

While some in-person mentoring occurs, most mentoring in *DO-IT* takes place via the Internet. Through electronic communications and projects using the Internet, mentors promote personal, academic, and career success. Electronic communication eliminates the challenges imposed by time, distance, and disability that are characteristic of in-person mentoring. For example, participants who have speech impairments or are deaf do not need special assistance to communicate via email. Those who cannot use the standard keyboard because of mobility impairments use adaptive technology to operate their computer systems.



DO-IT Mentors offer Protégés...

Information—*Mentors* share their knowledge and experiences with protégés.

Advice—*Mentors* make suggestions to help protégés reach their academic, career, and personal goals.

Challenges—*Mentors* stimulate curiosity and build confidence by offering new ideas and opportunities.

Contacts—*Mentors* introduce their protégés to valuable academic, career, and personal contacts.

Direction—*Mentors* help protégés discover their talents and interests and devise strategies to attain their goals.

Role Modeling—*Mentors* accomplish many of these goals by letting their protégés know who they are.

Support—*Mentors* encourage growth and achievement by providing an open and supportive environment.

DO-IT encourages one-to-one communication between protégés and *Mentors* via email. It also facilitates communication in small groups through the use of electronic discussion lists. For example, one group includes both mentors and protégés who are blind. They discuss common interests and concerns such as independent living, speech and Braille output systems for computers, and options for displaying images and mathematical expressions.

While most communication occurs via email, some *Mentors* meet their protégés during summer

study programs at the University of Washington and at other DO-IT activities across the United States. In-person contact strengthens relationships formed online.

DO-IT received national recognition with the Presidential Award for Excellence in Mentoring “for embodying excellence in mentoring underrepresented students and encouraging their significant achievement in science, mathematics, and engineering.” It was also showcased in the President’s Summit on Volunteerism and received the National Information Infrastructure Award “for those whose achievements demonstrate what is possible when the powerful forces of human creativity and technologies are combined.”

Research

DO-IT has been studying the nature and value of e-mentoring since 1993. Thousands of email messages have been collected, coded, and analyzed; surveys were distributed to *Scholars* and *Mentors*; and focus groups were conducted.

Preliminary findings suggest that computer-mediated communication can be used to initiate and sustain both peer-to-peer and mentor-protégé relationships. It can also alleviate barriers to traditional communications due to time and schedule limitations, physical distances, and disabilities of participants. Both young people and *Mentors* in the study actively communicate on the Internet and report positive experiences in using the Internet as a communication tool. The Internet gives these young people support from peers and adults otherwise difficult to reach, connects them to a rich collection of resources, and provides opportunities to learn and contribute. Participants note benefits over other types of communication. They include the ability to communicate over great distances quickly, easily, conveniently, and inexpensively; the elimination of the barriers of distance and schedule; the ability to communicate with more than one person at one time; and the opportunity to meet people from all over



the world. Many report the added value that people treat them equally because they are not immediately aware of their disabilities. Negative aspects include difficulties in clearly expressing ideas and feelings, high volumes of messages, occasional technical difficulties, and lack of in-person contact. There are gender differences in e-mentoring as well. For more information about the results of this study, consult the References section of this publication.

Preliminary findings of this study suggest that peer-to-peer and mentor-protégé relationships on the Internet perform similar functions in providing participants with psycho-social, academic, and career support. However, each type of relationship has its unique strengths. For example, peer-to-peer communication includes more personal information than exchanges between *Mentors* and protégés.

It is often reported in the literature that peer and mentor support can help students with disabilities reach their social, academic, and career potential. However, constraints imposed by time, distance, and disability make such relationships difficult to initiate and sustain. This study suggests that practitioners and parents should consider using the Internet as a vehicle for developing and supporting positive peer and mentor relationships.

Getting Started

Following are a few suggestions for new *DO-IT Mentors*.

- Get to know several protégés who have interests or disabilities similar to yours. What are his or her personal interests? Academic interests? Career interests?
- Introduce yourself to the group. Share your personal interests, hobbies, academic interests, and career path.
- Explore interests with protégés by asking questions, promoting discussion and pointing out resources such as websites.

DO-IT Protégés offer *Mentors*...

A Chance to Share Strategies—*Mentors* pass on hard-earned experiences. As reported by one *Mentor*, “I’ve been through this thing. I had a stroke and so on. And I find it incredibly gratifying to be able to share that with someone, and to be able to help someone else who’s going through some of the same things.”

Challenge—*Mentors* develop their own personal styles for sharing their skills and knowledge via electronic communication.

Fun—*Mentors* share in the lives of motivated young people. Listening to them, hearing about their dreams, helping them along the road to success—it’s fun!

New Ideas—*Mentors* join an active community of talented students and professionals with a wide range of disabilities who are eager to share their own strategies for problem-solving and success.

Opportunities to Help Set Goals—One *Mentor* explains, “I try to tell the DO-IT kids to listen to their hearts and think about what they really want to do. Don’t listen to people who say no, you can’t do this or that, or you should be thinking only about this kind of work; just think about what you really want to do, what turns you on, and go for it.”

- Encourage participation in DO-IT activities and try to attend activities when possible. *Mentor*-protégé relationships are strengthened through face-to-face contact!
- Facilitate contact between students and people with shared interests or resources (e.g., professors, professionals, service providers, friends).



References

Burgstahler, S., & Doyle, A. (2005). Gender differences in computer-mediated communication among adolescents with disabilities: A case study. *Disability Studies Quarterly*, 25(2).

Burgstahler, S. (1997). Peer support: What role can the Internet play? *Journal of Information Technology and Disabilities*, 4(4). www.easi.cc/itd/volume4/number4/article2.html

Burgstahler, S., & Cronheim, D. (2001). Supporting peer-peer and mentor-protégé relationships on the internet. *Journal of Research on Technology in Education*, 34(1), pp. 59-74.

Video

A short video, *Opening Doors: Mentoring on the Internet*, may be freely viewed at www.uw.edu/doit/Video/opendr.html or purchased in DVD format.

About DO-IT

DO-IT (Disabilities, Opportunities, Internetworking, and Technology) serves to increase the successful participation of people with disabilities in challenging academic programs and careers. Primary funding for DO-IT is provided by the National Science Foundation, the State of Washington, and the U.S. Department of Education.

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Acknowledgment

This material is based upon work supported by the National Science Foundation under Grant # 9725110. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author and do not necessarily reflect the views of the National Science Foundation.



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