Use technology as an empowering tool.

Do what you can with what you have, where you are.

— Theodore Roosevelt —

Being *technologically competent* can provide an avenue to academic and career success. Computer technology is one of the most powerful tools available to individuals with disabilities. Technology, including computers, adaptive technology and the Internet, can help *maximize independence, productivity,* and *participation.* It can lead to the highest levels of success—personal, social, academic, and professional. As reported by successful individuals with disabilities:

- The computer helps me organize my thoughts. I can read and make improvements with ease. I can check all of my papers for spelling errors before I send them. I am a really BAD speller. (high school student with a learning disability)

- I use a combination of a palmtop note taker computer and a desktop computer to write. Without them I'd be lost. (college student with mobility/health impairments)

- Without computers or the Net I would not be doing many things that I'm doing today. For instance, I am involved in a writing forum on the Net that lets writers talk about writing and share their pieces of literature with each other. Since I want to be a writer this has been VERY helpful. (high school student with Dyslexia and Attention Deficit Disorder)

- One of my two or three best friends—maybe best next to my wife—and I met on the Internet, and we are not only friends but close working colleagues. (professor who is blind)

And new products are developed every year. As pointed out by a college student who is blind:

- For me I look forward to the future with optimism because I long for the advancements that humanity will make in the fields of technology. Every year more and more technology is developed and marketed that can help make life easier for people with visual impairments.

In the following online activities, young people learn about the roles technology has played in the success of people with disabilities and about how they can use technology to achieve their own success. By the end of this chapter, they will learn how computer technology can help them:

- pursue recreational activities.
- make and maintain friendships.
- communicate with mentors.
- learn and enhance academic performance.
- achieve high levels of independence and productivity.
- develop skills that will lead to success in employment.
- pursue careers in fields that might otherwise be inaccessible.

The e-mentoring administrator can select appropriate messages from the following examples and send the *Mentor Tip* messages to the mentors only and the *E-Community Activity* messages to the entire online mentoring community. Use these examples to stimulate other ideas for online discussions. It is desirable that, ultimately, most discussion topics come from the mentors and protégés.

E-Community Activity: Surveying Accessible Technology

Send this message to the e-community of protégés and mentors.

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Subject: Surveying accessible technology

There are many types of assistive technology that allow people with
disabilities to use computers. For a summary of approaches, consult
Access to Technology: An Online Tutorial at

  http://www.washington.edu/doit/Brochures/Technology/aeit.html

What assistive technology do you use and/or would you like to use?
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Mentor Tip: Promoting Technology

Send this message to the mentors only.

Subject: Mentoring tips on promoting technology

The following statements are true.

- Computers can help students in school.
- Computer skills can lead to good jobs.
- Computers can be used to support personal interests and social life.
- Computers can help young people communicate with mentors.
- Increasing numbers of jobs require computer skills.

Below is specific advice from successful teens and adults with disabilities about encouraging young people with disabilities to use computers.

- The Internet is a valuable tool. Parents and teachers should do everything they can to provide access to the Internet to their students/children and then encourage them to use it. (college student who is blind)

- I would advise a parent or teacher to tell kids that computers are the future and if they don't know how to use one then they will get lost in the dust. (high school student with a learning disability)

- Being able to use a computer is a great skill to have today. Don't be afraid of computers! They won't bite. Kids with disabilities benefit extremely from access in their everyday academic lives. It is a tool that "levels the playing field." Computers and the Internet also promote social interactions. (high school student with a mobility impairment)

- If you want to encourage a kid to use a computer, it is very important not to force them to do it. Everyone learns better when they are pursuing a personal interest. (high school student with a mobility impairment)

- I would encourage students to join discussion lists that cover topics they are interested in. (young person with a mobility impairment)

- (1). Give your kids an early start at learning technology. They should at least understand word processing, email, World Wide Web, and even some spreadsheets and databases. (2). Teach them a wide variety of programs to increase their chances of getting jobs. (3). Give them the opportunities to do internships to practice using technology on the job. (college student who is blind)

- Experience, enjoy, and apply the concepts gained in everyday situations. (physics professor with a mobility impairment)

- Parents and teachers should make sure that disabled students have easy and frequent access to computers and that students know how to use their technology comfortably without much assistance. DO-IT is great for learning how to effectively use email and the Internet—today I'm still using a lot of things that I learned at the Summer Studies. (college student who is deaf)

- Let them work at their own pace. If they are totally for it the first time you ask them, great! However, if it takes a few times of urging them to use computers at school, just be patient with them. They will catch on sooner than you expect. (high school student with a mobility impairment)

- Before you invest in a computer for a student, give him an opportunity to try out different types of technology. Let him pick out the hardware and software that works best for him. Don't make false assumptions! Just because a device works well for some doesn't mean it will work for all. Get a complete idea of what the student needs, and use all the resources you have to learn what is available. Let him get recommendations from others and try out different pieces of equipment. From that point, you and the student can decide what kind of technology works best. (college student who is blind)

- Email requires deaf individuals to really focus on developing English skills. Encourage students to always proofread their messages before sending them. Once you hit the send button, it's too late to go back and change something. (employee who is deaf)

- My advice to students with disabilities and their parents and teachers is that technology is not a nicety; it is a necessity. Get it, learn it, and use it. (college student who is blind)

Mentor Tip: Technology Access

Send this message to the mentors only.

Subject: Mentoring tips on technology access

In school, technology can help level the playing field by giving students with disabilities opportunities to perform tasks independently and maximize efficiency. Below, people with disabilities share how computer technology has helped them achieve success in school. Here are some examples of how individuals with disabilities access technology.

- I use word processing programs to compose my assignments, and the spell check feature to make my writing as professional as possible. I'm a terrible speller. (college student with a brain injury)

- I use a computer every day to complete English and history assignments. I input them into a word processor via dictation software. This is because my spoken grammar is better than my written grammar. I am able to focus more on the learning and ideas, instead of the methods and mechanics. (high school student with Dyslexia and Attention Deficit Disorder)

- I use a computer with a speech synthesizer, screen reader software, a scanner and optical character recognition software, a Braille printer, Braille translator software, and Internet services. The technology has really helped me with my schooling. I can do my homework using a word processor; communicate with my family, teachers, and friends using email; scan printed documents using my scanner and optical character recognition software; and do online research using the Internet. (college student who is blind)

- The computer technology I use has a large monitor that makes it easier for me to read and edit my work while it is on the screen and avoid visual fatigue. The computer helps me write and edit my papers for school quickly. I can get information from the Internet for research papers. (college student who is visually impaired)

- I use a Braille 'n Speak™ (an electronic note taker with a Braille keyboard and speech output), with the disk drive accessory. I also use a computer with screen reader software, and a speech synthesizer. I use the Braille 'n Speak™ for taking notes, keeping track of appointments and things to do, a scientific calculator, and a notepad for small writing projects. I use the computer for writing reports, reading email, surfing the Internet, and putting the finishing touches on the above small writing projects. (college student who is blind)

Mentor Tip: Technology and Success in School

Send this message to the mentors only.

Subject: Mentoring tips on technology and success in school

Students with disabilities can use technology to help them
independently and efficiently complete a variety of tasks. Below,
people with disabilities share how computer technology has helped
them achieve success in school.

- With computer technology, I am able to type most of my assignments
  instead of trying to write them. I'm left-handed and my left hand
  is considerably weaker than my right, making it difficult for me to
  write. (high school student with a mobility impairment)

- I use the Internet to look up information on various subjects.
  (high school student with a psychological impairment)

- I can type faster than I can write papers for school. On the
  computer it is also easier to correct any mistakes. (high school
  student with a mobility impairment)

- I use a computer every day to complete English and history
  assignments. I input them into a word processor via dictation
  software. This is because my spoken grammar is better than my
  written grammar. I am able to focus more on the learning and ideas,
  instead of the methods and mechanics. (high school student with
  Dyslexia and Attention Deficit Disorder)

- Email helps tremendously when doing group work and communicating
  with professors. (graduate student with a hearing impairment)

- Since I have a hearing impairment and cannot use a regular
  telephone, I don't know what I would do without email! Email is how
  I contact professors and the Disabled Student Services office at
  my college. Some of my professors have web pages, and I use those a
  lot to help me with classes. Some web pages have lecture outlines/
  notes for upcoming lectures, exam dates, sample questions from
  previous years' exams, and other valuable tools to help you succeed
  in class. (college student who is deaf)

Mentor Tip: Technology and Success in School (continued)

- Electronic mail allows me to keep in contact with instructors if I am absent from class. (high school student with a learning disability)

- The computer is an invaluable tool when it comes to research. If I need to look something up for a term paper, I no longer need to go to the library; rather, I can obtain the information via the Internet. (high school student with Dyslexia and Attention Deficit Disorder)

- The Internet has been very useful in my college search. It has helped me find specific schools that have the programs I'm interested in. The Internet has also allowed me to stay in contact with the disability services coordinator at the school I'm planning to attend, which is out of state. (high school student with a learning disability)

As you interact with protégés, encourage them to use technology in school and share with them the addresses of interesting websites you find on the Internet.

E-Community Activity: Becoming Digital-Age Literate

Send this message to the e-community of protégés and mentors. The content is from *enGauge 21st Century Skills: Literacy in the Digital Age,* a report published in 2003 by North Central Regional Educational Laboratory and the Metiri Group.

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Subject: Becoming digital-age literate

A report titled enGauge 21st Century Skills: Literacy in the Digital
Age lists four sets of skills all people need to be successful in the
21st century.

 • digital-age literacy,
 • inventive thinking,
 • effective communication, and
 • high productivity.

What do you think is meant by "digital-age literacy?" How will you
make sure you have it?
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E-Community Activity: Using Technology with Young Children

Send this message to the e-community of protégés and mentors.

Subject: Using technology with young children

How would you advise parents, teachers, or friends of a child with
a disability about the value of using technology and about what age
children with disabilities should begin to use technology to maximize
their capabilities?

E-Community Activity: Using Technology for Success in School

Send this message to the e-community of protégés and mentors.

Subject: Using technology for success in school

Technology—computers, adaptive technology, the Internet—can help individuals with disabilities maximize their independence, productivity, and participation.

Describe what computer technology you use in school and what you use it for. What other technology, if available, would help you in school?

E-Community Activity: Using Technology to Complete Homework

Send this message to the e-community of protégés and mentors.

Subject: Using technology to complete homework

An example of how a high school student was resourceful in using technology to help him complete a school assignment occurred in an electronic community. He posted the following message to a large group of peers: "Hi everyone. For an assignment in a class I am taking, I need to interview people on their definitions of love. I would appreciate any definitions from you for my paper. Thank you." Here are some of the responses he received.

- Love is unconditional acceptance of a person, in spite of any physical, emotional, or spiritual conditions they may have.

- Love is caring deeply and with a passion.

- Love is the one thing that everyone, in some manner, wishes to give and to have given to them. It is probably the topic which has received, across cultures, the most thought and effort to understand. How ironic then that it is probably the most elusive and difficult goal we will ever try to attain.

- Love is the quality of giving of one's life so that others' lives may be bettered—in other words, it's the way that we live as it relates to how we give (people just LOVE that rhyming stuff).

- It has a lot to do with giving and working with, as opposed to against, someone.

- I don't think that a person who has lost the capacity to love is human anymore.

- To keep your own thoughts and ideas out of the way when you are listening to another human being is the ultimate act of love. When you love, you feel free and unguarded with the other person. But before you can love, you must first risk. Makes life kind of tough, doesn't it?

Describe a creative way you have used or could use technology to help you in school.

E-Community Activity: Using Technology in Science and Engineering

Send this message to the e-community of protégés and mentors.

Subject: Using technology in science and engineering

Technology makes it possible for people with disabilities to engage in studies and careers that were at one time not accessible to them. Share examples of how modern technology has made it possible for people with disabilities to pursue these fields.

E-Community Activity: Surfing the Web to Prepare for College

Send this message to the e-community of protégés and mentors.

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Subject: Surfing the web to prepare for college

The Internet provides a rich collection of resources to prepare for
college. The AccessCollege website links to many of them and provides a
searchable knowledge base of frequently asked questions, case studies,
and promising practices.

Access the DO-IT website at

  http://www.washington.edu/doit

Select "AccessCollege" and then "The Student Lounge" and explore the
resources you find.

Tell the group one thing you learned about preparing for college at
DO-IT's AccessCollege website.
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E-Community Activity: Using Technology in Your Career

Send this message to the e-community of protégés and mentors.

Subject: Using technology in your career

Computer technology is used in almost all career fields today. How will technical skills help you get and excel in a job in a field of interest to you? How can you get the skills you need?

E-Community Activity: Using Technology in Careers

Send this message to the e-community of protégés and mentors.

Subject: Using technology in careers

Computer technology can help you prepare for and succeed in careers. The following comments demonstrate the value of computers in the employment arena.

- I have a couple of mentors who have helped me along my career path, and they have saved me from making some mistakes that they made. The Internet is a valuable tool in locating and communicating with mentors in your career area. (high school student with mobility impairment)

- Computer technology has really helped me with my career preparation. I use online communication all the time to learn about job opportunities in different areas. For example, I can go to the employment department online and download information about technical support positions in my area. I can do so many things with online communication that can't be done over the phone. If I get hold of information I want to take with me somewhere, I can load it into a word processor, delete unnecessary text, and then translate the message into Braille for a quick reference. (college student who is blind)

- The technology has really helped me with my career goals. I have had several computer-based internships while still in college. My experiences helped me develop and apply my computer skills and made me decide to get a degree in computer applications so I can assist others with technical issues. (college student who is blind)

- I use a word processor, online communications, and other programs. Technology has helped me complete three successful internships where I used my online and word processing skills to do my work. For example, I just completed a summer work experience at the public library and I did a lot of online research. I even got the opportunity to train other staff members in how to use special technology. (college student who is blind)

What advice would you give to parents and teachers about encouraging students with disabilities to learn to use computers in preparation for their careers?

E-Community Activity: Surfing the Web to Prepare for a Career

Send this message to the e-community of protégés and mentors.

Subject: Surfing the web to prepare for a career

The Internet provides a rich collection of resources to prepare for a career. The AccessCAREERS website links to many of them and provides a searchable knowledge base of frequently asked questions, case studies, and promising practices.

Access the DO-IT website at

  http://www.washington.edu/doit

  Select "AccessCAREERS."

  Select "Resources for Students."

  Select "precollege students" or "college students," and explore the resources you find.

  Select "Search knowledge base." Type in words about topics you would like to learn more about in the "enter search text" box. Select other items if you would like to focus your search, and then select "search."

Tell us one thing you learned about preparing for a career from your exploration of DO-IT's AccessCAREERS website.

E-Community Activity: Using Technology to Enhance Your Social Life

Send this message to the e-community of protégés and mentors.

Subject: Using technology to enhance your social life

As a graduate student with a hearing impairment stated, "I think the most successful people with disabilities are those who have developed social skills that allow them to interact effectively with people who don't have disabilities. This includes educating their peers about their disabilities and getting others to understand that they are people first."

The Internet can help you cultivate positive social relationships. Speaking ability and speed of communication are unimportant when communicating via email. Spell check features improve the quality of writing for those whose disabilities impact writing ability.

Below, people with disabilities discuss how technology has helped them achieve a successful social life. Read each statement and see how it applies to you.

- The computer has become a real asset to my social life. Because of a voice impairment, it is sometimes difficult for me to communicate with people in person. However, with the advent of electronic mail, that is no longer an issue. Electronic mail allows me to communicate with friends without being hampered by my voice. Electronic mail also allows me to keep in contact with family members and friends who live out of state. (high school student with a speech impairment)

- I have made many, many friends over the Internet—more than I have in "real" life. This includes people who have the same interests as me and who do the same work as I want to get into. (young person with a mobility impairment)

- The Internet allows me to keep in touch with friends who live far away from me. I have received help from mentors through the 'Net. It is always great to have contact with people who can help you out with a problem or help you find what you are looking for. (college student who is blind)

E-Community Activity: Using Technology to Enhance
Your Social Life (continued)

- I can communicate with my mother and father without having to pay long-distance charges. I also use a financial program to keep track of my checking account charges. (adult with a visual impairment)

- I am deaf and I can't hear over the phone. I have to use a special machine and then call the operator. It takes a long time. When I use the computer to communicate, people don't even know that I am deaf. I just type the words. I like that. (high school student who is deaf)

- I receive help from a mentor via email and spread some wisdom of my own. (college student with a mobility impairment)

- I find it's difficult to make friends because people judge me before they know me. I'm quite shy, but to people who actually know me, I'm quite the 'hyper-hellion.' I think this has a lot to do with my disability, because it just turns into a label for me to wear. You try to explain your disability, which is part of you, and all you get back is sympathy. Making friends on the Internet allows me to escape my label. (high school student with a mobility impairment)

How has computer technology supported your social life and helped you give and receive help? For example, have you made friends on the Internet? Have you received help from a friend or mentor? Have you been a mentor to someone else?

E-Community Activity: Affirming Success with Technology

Send this message to the e-community of protégés and mentors.

Subject: Affirming success with technology

Below are some statements by successful young people and adults with disabilities about using technology. Read each statement and think about how it applies to you.

- I use technology to help me with my school work.

- I use technology to help me prepare for a career.

- I use the Internet to maintain friendships.

- I use the Internet to communicate with adults who provide me with useful information and/or care about me personally.

How could you make better use of technology to help you succeed in school and/or work?