E-Mentoring
( Telementoring, Cybermentoring, Virtual Mentoring )

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What is E-mentoring?

• The merger of mentoring with electronic communications to develop and sustain mentoring relationships linking a senior individual (mentor) and a lesser skilled or experienced individual (protégé) independent of geography or scheduling constraints.

• Intellectual partnerships: In the field of education, E-Mentoring often involves linking students up with knowledgeable experts who have an interest in developing the skills, knowledge, confidence and culturing understanding of the protégé to help him or her succeed.

• E-mentoring is a relatively young area of research (Bennett, 1997)
E-mentoring as a preferred communication medium

– Made possible by the increased availability of electronic communications on college campuses (Guernsey, 1997, Oct. 17), in the workplace, in homes, schools, and libraries

– Provides a flexible communication environment independent of time and space; allows for asynchronous exchanges (ideal medium for mentoring) (Steinberg, 1992)

– Unique qualities of electronic communications (attenuation of status differences and ease of thoughtful responses) make it especially promising as a medium for developing mentoring relationships.
A Medium for Open and Supportive Relationships

– In a networked academic environment students have more interactions with faculty (Hartman et al. 1991) and with each other (Althaus, 1997)

– Students who participate in online group discussions report greater cohesiveness within a learning group (Windschitl & Lesehm-Ackerman, 1997), learn more, and achieve higher grades than students taking part in face-to-face discussion groups (Althaus, 1997)
Potential Drawbacks

• Deceptively simple in concept and unexpectedly difficult to do well for an extended amount of time

• Requires careful, realistic thinking and planning: needs to be carefully planned, well staffed, and sufficiently funded (planning, prompting, supporting, consulting, suggesting, formative evaluations, troubleshooting)

See below: MentorNet Program, International Telementor Program,
Why E-mentoring?

- If it is an essential part of the institutional mission it brings together mentors and protégés for positive relationships
- It supports academic and curricular goals
- It is most successful if it is used to leverage an existing program by supporting the program’s objectives and learning outcomes.
- It is not synonymous with “tutoring”: the primary goals of these programs are different (for tutoring the primary goal is to boost grades and standardized test scores)
- It is not a “pen-pal” relationship.
Characteristics of a Structured E-mentoring Program

• Viewed as an ongoing (powerful) learning process which assures the intergenerational transfer of knowledge and “know-how” throughout a lifetime (Zachary, 2000; Clutterbuck, 2001)

• Includes learning objectives, measures, as well as administrative and technological support
  – Training of mentors and protégés, facilitation or “coaching” of the relationships
Characteristics of a Structured E-mentoring Program (Cont’d)

- Occurs within a formalized program environment
- Provides training, coaching, and structure to increase the likelihood of engagement in the E-mentoring process
- Includes regular (annual) program assessment
Benefits from E-mentoring

1. An excellent enhancement to offline (face-to-face) programs: it connects people and ideas

2. It is not necessarily *better* than face-to-face programs: Brings mentors and protégés together for long, in-depth, productive, and mutually benefiting interactions when the same could not happen for logistical reasons

3. Can enhance values related to field of enquiry or to program of study

4. An excellent way to enhance students’ writing, reading, and online researching skills
Benefits from E-mentoring (Cont’d)

5. A “safe” learning environment: Many online mentoring programs report that students will discuss subjects online that they are not always comfortable talking about face-to-face.

6. Addresses the needs of the affective domain (Emotional intelligence) through multi-media and networking

http://www.eiconsortium.org/about_us.htm

and

http://www.eiconsortium.org/members/kram.htm
Benefits from E-mentoring (Cont’d)

7. Minimizes the scheduling and geographic concerns associated with face-to-face mentoring programs: mentor and protégé can benefit from asynchronous communication while still maintaining a focus on the dialogue

8. For women of color, it is the only significant predictor of success (Faison, 1995)

9. Helps expose students to the opportunities in their fields, offers guidance and advice based on experience, and provides support, encouragement, and access to professional networks for further career development
Examples

• International Telementor Program
  http://www.telementor.org/

• MentorNet
  http://www.mentorNet.net/
International Telementor Program (ITP)

http://www.telementor.org/

- Facilitates electronic mentoring relationships between professional adults and students worldwide
- Since 1995 over 15,000 students throughout nine countries have received support, encouragement, and professional guidance. ITP serves students in K-12 and home school environments as well as college and university settings.
International Telementor Program (Cont’d)

A study of teacher survey data from September, 1999 to March, 2002 indicates E-mentoring is making a measurable difference for students. A high percentage of teachers witnessed significant improvement in

- Writing skills (95%),
- Self-directed learning (88%),
- Critical thinking skills (75%),
- Career and workplace knowledge (57%),
- Desire to go to college (46%),
- Subject grades (45%), and
- Science comprehension and ability (44%).
A primary goal of the ITP program is to help students adopt a proactive learning position and begin creating their own independent learning plans by taking more responsibility in their learning (“Intentional Learning”).

– The findings report that 81% of the teachers witnessed improvement in this area.
International Telementor Program
Technological Challenges

• Many teachers indicated many problems with computer equipment in the school site.

• Teachers reported that the technology was unreliable and out-of-date.
http://www.mentorNet.net
Founded in 1997: is a nonprofit E-mentoring network that addresses the retention and success of women in engineering, science and mathematics.

Large scope of the program -- In 2002-2003:
2,800 undergraduate and graduate women studying engineering and related sciences at more than 80 colleges and universities across the U.S. and in several other nations, were matched in structured, one-on-one, email-based relationships with male and female scientific and technical professionals working in industry.
MentorNet (Cont’d)

Mission

- To further women’s progress in scientific and technical fields through a dynamic, technology-supported mentoring program, and,
- To advance women in society in developing a diversified, expanded, and talented workforce
MentorNet (Cont’d)

Vision is Threefold:

• To establish excellence in large-scale E-mentoring
• To create the community of choice for women in engineering and science through online mentoring and networking; and,
• To leverage that community for positive social change
MentorNet 2001-2002 Survey

2973 students - 1101 responded
2749 mentors - 1424 responded
Response rate: 37% and 52% respectively
MentorNet 2001-2002 Survey
(Cont’d)

Student Outcomes (5 general categories):
1. Ongoing encouragement, reassurance, and moral support - boosting confidence
2. Career information, alternatives and inspiration; learning about mentor’s workplace
3. Academic Advice and support; relating academic work to the workplace
4. Advice for women; female role models in engineering and science
5. Options for balancing family and work
MentorNet 2001-2002 Survey (Cont’d)

Mentor Outcomes

1. Personal satisfaction of helping another person (74%)
2. Appreciated the opportunity to pass along what they have learned to the next generation (81%)
MentorNet 2001-2002 Survey (Cont’d)

Mentors’ ratings of their own outcomes varied by racial/ethnic groups:

African American (n=64)
• Experience as mentors improved their skills for recruiting new talent (40% as compared to 22% of all other mentors)
• Renewed commitment to their field (48% as compared to 33% of all other mentors)
MentorNet 2001-2002 Survey (Cont’d)

Hispanic (n=63)
- Experience increased their own self-confidence (38% as compared to 25% of all other mentors)
- Renewed commitment to their field (50% as compared to 33% of all other mentors)

Asian (n=160)
- Experience improved their supervisory skills (36% as compared to 23% of all other mentors)
- Increased self-confidence (40% as compared to 24% of all other mentors)
MentorNet (Cont’d)

- Participating Colleges and universities
  [http://www.mentorNet.net/Documents/Partners/Campuses/CurrentCampuses.aspx](http://www.mentorNet.net/Documents/Partners/Campuses/CurrentCampuses.aspx)

- Corporations and Corporate Foundations
  [http://www.mentorNet.net/Partners/Corporations/](http://www.mentorNet.net/Partners/Corporations/)

- Government Agencies and National Labs
  [http://www.mentorNet.net/Partners/Government/](http://www.mentorNet.net/Partners/Government/)
MentorNet (Cont’d)

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